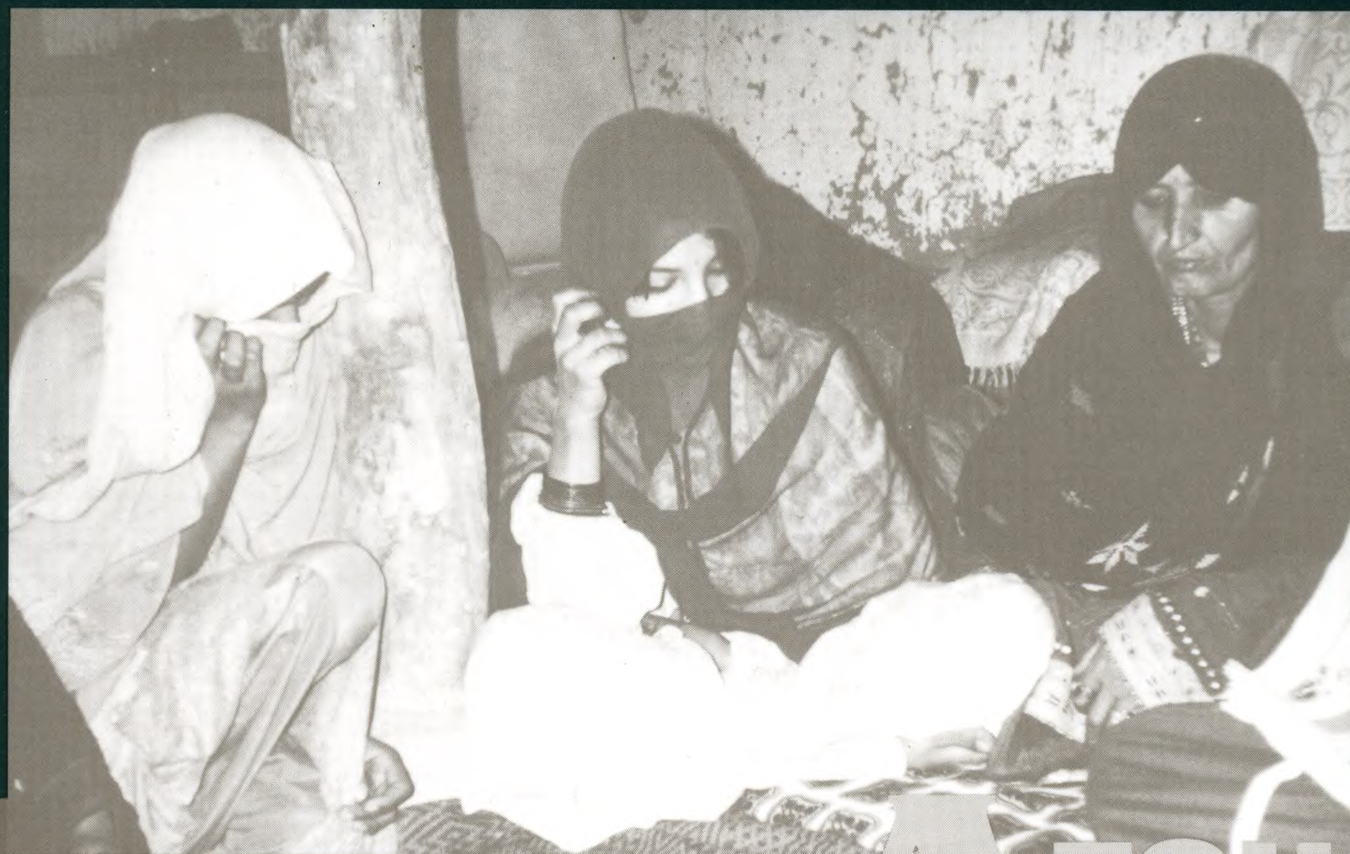


Afghan Volunteer Health Sister Program Manual

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MSH Management Sciences for Health
USAID U.S. Agency for International Development

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This book is available free, upon request, to users in developing countries and staff of non-government agencies and nonprofit organizations.

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Dedication

This Manual is dedicated to the women of Afghanistan—the caretakers of the future—for their strength, endurance, and commitment to the well-being and health of their families during a period of strife and war...and especially to the 150 Volunteer Health Sisters of the pilot VHS Program.

Contents

Part II

Exhibits

Acronyms

AHSSP	Afghanistan Health Sector Support Project
BHC	Basic Health Center
BHW	Basic Health Worker
CDD	Control of Diarrheal Diseases
CHC	Comprehensive Health Center
EPI	Expanded Program on Immunization
FHW	Female Health Worker
IUD	Intra-Uterine Device
MCH	Maternal and Child Health
MCHO	Maternal and Child Health Officer
MSH	Management Sciences for Health
NWFP	Northwest Frontier Province
ORS	Oral Rehydration Salts
PBUH	Peace Be Upon Him
RHO	Rural Health Officer
SSS	Sugar-Salt Solution
T.O.T.	Training of Trainers
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children Fund
USAID	United States Agency for International Development
WHO	World Health Organization
VHS	Volunteer Health Sister

Preface

Afghanistan has been at war for the last 15 years. The destruction has undoubtedly increased the number of deaths and the tragedies experienced by every family, but most deaths of Afghan women and children continue to be caused by the same public health challenges faced by poor women and children throughout the world: pregnancy-related deaths of women and childhood morbidity and mortality due to diarrhea, pneumonia, infectious diseases, and malnutrition. Establishing health services for women and children must be a public health priority.

Much progress has been made during the past five years: the basic elements of a maternal and child health (MCH) referral system have been planted. MCH clinics have been set up, MCH services such as immunization have increasingly been integrated into the basic health services, traditional birth attendants have been trained, and contraceptives have been issued where communities have accepted them.

Nevertheless, MCH services are scarce and the health resource base is uncertain. To expand access to health care, health information and services must be placed in the hands of primary caretakers in the households. Although the female literacy rate is less than 15% overall (UNICEF, 1993) and under 2% in some rural districts (Tawfik et al., 1992), community women, literate or non-literate, can become valuable health resources to extend health information and provide referrals and simple services.

The utility of developing a role in the health care system for community women has been demonstrated by the former "Urban Volunteer Program", now the "Urban Health Extension Project" of the International Centre for Diarrheal Disease Research, Bangladesh (ICDDR,B). Started in the 1980s as a service delivery program, the program evolved into a structured operational research and delivery project which has illustrated the value of using community women, often non-literate, as extenders of the health system, to reach other women living in urban slums and to provide health education, some essential household treatments, and referral, especially for immunization (Hel Baqui et al., 1993).

At a critical time in the process of reestablishing health services in Afghanistan, the volunteer concept was introduced to Afghan policy makers as they were striving to reconstruct a rural health care system and reactivate social, cultural, and health affairs. The volunteer concept was readily accepted

as a low cost endeavor that could target the underserved, high-risk poor for preventive health strategies in a country faced with serious resource constraints and civil war. The enthusiasm and hard work which senior and mid-level health managers, trainers, and service delivery personnel generated to make the program successful were startling. The endorsements given by the public health leadership were critical in mobilizing support for the Volunteer Program.

The Afghan Volunteer Health Sister Program represents a fine example of the value of cross-fertilization between health programs in developing countries. Dr. Diana Silimperi's experience with the Urban Volunteer Program in Bangladesh was used as a model for the Afghan Volunteer Health Sister Program.

The purpose of this Manual is to share the lessons learned about establishing a volunteer outreach program for women and children in Afghanistan in order to further expand and improve health care for these most vulnerable groups. We hope that this Manual will be useful to health care providers and planners in establishing community-based volunteer programs not only in Afghanistan, but also in other countries faced with similar economic, social, and educational challenges to providing quality health care for women and children.

Acknowledgments

This manual reflects the dedicated efforts of the Islamic State of Afghanistan Ministry of Public Health and the Regional Health Service Administrations towards improving the health status of the women and children of Afghanistan.

Dr. Sayed Mohammad Amin Fatimie, Minister of Public Health, and Dr. Shakrullah Wahidi, Director of the MCH Department of the Ministry, have been instrumental in encouraging the Volunteer Health Sister (VHS) Program at the policy level. The staff of the Ministry of Public Health MCH Department deserve special appreciation for their contributions to setting up the pilot Volunteer Health Sister Program: Mrs. Zarghuna, Dr. Belgees, Dr. Shah Agha, and Dr. Daud.

The Institute of Public Health has played a particularly important role in organizing and managing workshops, especially Dr. Akbari, Dr. Qassim, and Dr. Shinwari.

From the Regional Health Administrations, we thank Dr. Nick Mohammed Atai, Dr. Daud, Dr. Sahar, and Dr. Gul Mohammed, who have all contributed directly and/or indirectly by supporting the pilot program in their regions.

The Trainer/Supervisors at each pilot site made the VHS Program a reality. These individuals built the support of their communities and trained Volunteers to provide health education and services for their people. Special thanks to the trainer/supervisors:

Dr. Ali Akbar of Qarabaghi, Qarabagh District, Ghazni
Mr. Wazir Gul of Baraki, Baraki Barak District, Logar
Dr. Eisa Khan of Basawal, Mohmandara District, Ningahar
Dr. Afzal and Dr. Waliullah of Khost Training Center, Paktia
Dr. Humayun and Mrs. Zari Gul of Bagrami, Sorkhroad District, Ningahar
Dr. Khaliq and Dr. Roona of Taloqan, Taloqan District, Takhar
Dr. Mohammed Amin and Mr. Enayatullah of Maknak, Malestan District, Ghazni
Mr. Obeidullah of Gigi, Asmar District, Kunar
Mr. Zahir of Sanglakh, Jalrez District, Wardak

Dr. S. Osman of Khost, Khost District, Paktia
Mr. Nik Mohammed of Saiedan, Charikar District, Parwan
Dr. Latifa of Khost, Khost District, Paktia
Dr. Dawood of Gulbahar, Gulbahar District, Parwan

Several individuals from the Ministry and Regional Health Administrations formed the working group to develop the concept of the VHS Program in its early stages. Dr. Amir Mohammed led the working group. Dr. Nooria Siddiqui and Dr. Shawzia further developed the management systems component of the VHS Program while at MSH.

The MSH Management Training Program has been a full-fledged partner in the Volunteer Health Sister Program, sharing their experience, time, enthusiasm, and knowledge about community-based initiatives. We sincerely thank Mr. Richard Johnson, Dr. Mubarak Shah, and Mrs. Razia.

Dr. William Oldham, Chief of Party of the Afghanistan Health Sector Support Project, has been a truly remarkable leader. His ability to guide and promote innovation further encouraged the development of the VHS Program as well as the broader MCH efforts. The ongoing encouragement for MCH from all of the AHSSP colleagues helped to overcome the day-to-day obstacles.

Mrs. Helen Demeyer, consultant to WHO/Peshawar; Mrs. Nancy Dupree, Afghanistan expert and Director of the Afghan Resource and Information Center; Dr. Pam Hunte, development anthropologist specializing in sociocultural change in South Asia; and Ms. Marilyn McDonagh of Save the Children Fund/UK (SCF/UK) all provided ongoing support and advice about the role of the VHS, helping to clarify the purpose and content of the program.

Mr. Douglas Palmer, Health Development Officer and Project Manager for USAID/Islamabad, encouraged our MCH efforts.

The Health Education Resource Center (HERC) of the International Rescue Committee (IRC) and SCF/UK were supportive by inviting VHS Trainer/Supervisors to observe the production of health education materials for use in the VHS Program.

Mrs. Fahima, Mr. Mohammed Omar, and Mr. Bari worked on the Dari computerization of the manual.

Among our MSH colleagues in Boston, Mr. David Collins, Mr. Saul Helfenbein, and Dr. Marc Mitchell, reviewed the technical content of the manual and provided valuable comments. Louis Bucciarelli and Alden Detwiler produced interim English drafts to maintain the momentum of the manual's development. Jacki Forbes and Greg Nealand helped establish and maintain our computer graphics system.

Mrs. Joanne Tighe edited and oversaw the production of the manual. Mr. Alan Yost provided expert skills in desktop publishing. Without their exceptional teamwork and expertise, this manual would not have been produced in its final form.

The information in this manual is based on significant adaptations from a number of publications:

The Afghan Female Health Worker Manual, from which much of the VHS Curriculum reference pages are reproduced as well as portions of the prime health messages. It is hoped that both trained traditional birth attendants (Female Health Workers) and VHSs in Afghanistan will thereby learn consistent health messages

UNICEF's *Facts for Life,* which articulates key information on practical, low-cost, family-based ways to save women's and children's lives

The Family Planning Manager's Handbook, from which the management chapters and the format of the VHS Program manual were adapted

Managing Drug Supply, which provided the framework and content adapted for Chapter 9 of this manual

"Monitoring and Evaluation of Child Survival Programs" by Jack LeSar and other MSH staff, and Partners in Evaluation, by Dr. Marie-Thérèse Feuerstein, describe monitoring and evaluation concepts in relatively simple language. Parts of both publications were adapted for Chapter 10 of this VHS Manual

Where There Is No Doctor, by David Werner, whose principles contribute to the foundation of the VHS Program Manual

The early work of Ms. Eva Gardner, as well as The Johns Hopkins University, in developing the Urban Volunteers Program in Dhaka, Bangladesh deserves special attention for being the model for the Afghan VHS Program.

Approximately 150 Volunteer Health Sisters who trained in the pilot program are still active. We thank them for contributing to the development of the VHS Program and to the well-being of their communities. We wish them and future Volunteers continued success.

Introduction

This manual has been written for Volunteer Health Sister Trainer/Supervisors and program managers who are directly responsible for implementing the Volunteer Health Sister (VHS) Program in Afghanistan.

The VHS Program was developed by the Afghanistan Health Sector Support Project (AHSSP) as a pilot program to test the feasibility of reaching women within the household with basic health information and services. The AHSSP, funded by the U.S. Agency for International Development (USAID) and technically supported by Management Sciences for Health (MSH), had begun in November 1986 as a humanitarian effort to develop health services for the war-torn country.

The AHSSP formally established a Maternal and Child Health Program in 1989, and initiated the pilot VHS Program as a key component of the maternal and child health system in 1991. The ability of the MCH Program to establish outreach activities for women was a significant accomplishment society where mobility for women is restricted by Muslim tradition and by war. The process that accomplished this merits strong review. Initial field assessments and the baseline evaluation indicated strong community support for the VHS Program and for the ability of the Volunteers to function. The pilot VHS Program was not expanded due to the closure of the AHSSP in 1994. This manual is based upon the lessons learned from the pilot program.

Both governmental and non-governmental organizations interested in improving the health status of women and children in Afghanistan are encouraged to expand the Volunteer Health Sister Program. Other countries may also be interested in developing a similar low cost, household-level volunteer program. The basic principles and management concepts presented herein will apply to most developing country settings. Afghanistan is unusual because women in the rural areas have little access to health care because of the sociocultural milieu in which "purdah", or the seclusion of women, predominates. This manual has taken into account the sociocultural environment in offering alternatives specific to Afghanistan for many issues faced in program implementation.

The Volunteer Health Sister Program is based on the following principles (Werner, 1977):

1. Health care is a right, but it is also a responsibility.
2. An individual who is provided with clear, simple information can learn to prevent and, in some cases, treat the most common health problems in his or her home, often earlier and less expensively than the formal health care system.
3. Medical knowledge should be freely available to all members of a society. It should not be the secret of a select, educated few.
4. People with little or no formal education can appropriately use basic health information as much as people with a great deal of education.

Volunteers can provide a low-cost, community-based extension of the formal primary health care system, particularly for underserved, high-risk communities. Volunteers can serve as a link between the community and the paid health workers of the formal primary health care system. The experience in Afghanistan builds on the experiences of other volunteer systems in Asia and Latin America.

Volunteer programs function best in areas where there is at least one health post or clinic to provide training and some supervision, as well as to support referrals. Even within these areas, Volunteers may be directed to serve households with the greatest health needs. Rural locations without any clinics are often the areas with the greatest health needs. It would be possible to set up a Volunteer Health Sister Program without a facility if there were a private practitioner willing to assume the responsibilities of a Trainer/Supervisor, or a mobile health team to intermittently provide the referral and support functions.

In the first part of this manual, Chapters 1 through 6 concentrate on the steps to plan, implement, and evaluate a VHS Program at the local level while chapters 7 through 13 encompass broader, regional and national level management issues. Part II (Chapters 14 through 21) is the actual curriculum to be used for training Volunteers.

Chapter 1 discusses in detail the rationale for the Volunteer Health Sister Program. The VHS Program, an informal maternal and child health (MCH) outreach system, forms the foundation of the primary health care system because it links households with the formal delivery system and focuses on prevention of common health problems. The name "Volunteer Health Sister" was derived from the concept that every woman is a sister to others in the community and, as a sister, shares and helps others as a family member would.

Chapter 2 discusses "The Relation of the Volunteer Health Sister to the Primary Health Care System." It is important to emphasize that the Volunteer Health Sister is an informal member of the health team within Afghanistan's primary health care system. Her role is to share basic health knowledge, to help educate people about ways to prevent illness, to distribute health promotion products such as soap or essential home-based treatments such as Oral Rehydration Salts (ORS), and to refer people who need more sophisticated treatment. The Volunteer Health Sister must know her limits in terms of what she can do and when she should seek help from others in the health care system. Formal health workers and the community must also understand the role of the Volunteer Health Sister and how to benefit from her services.

The community also has a responsibility to help the Volunteer Health Sister. Community members can encourage families to use VHS services, assist in recruitment and selection, and provide essential resources that the government or donors cannot provide for the program. Chapter 3 covers the role and responsibilities of the community for supporting this informal MCH system, and Chapter 4 presents alternatives for recruiting and selecting women to serve as Health Sisters.

The training of Volunteer Health Sisters and Trainer/Supervisors is based on the key "Volunteer Health Sisters' Responsibilities," which are described in detail in Chapter 5; these tasks have been selected so that women at the household level can deal with the most common illnesses and health problems that kill infants, children, and child-bearing women.

Volunteer Health Sisters' training takes place at several levels in the training system, as described in Chapter 6.

Chapters 7 through 11 and 13 explain how management systems for supervision and referral, monitoring and evaluation, logistics and supplies, quality assurance, and financial monitoring must be included as part of the Volunteer Health Sister Program to assure a quality program that reaches high risk women and children.

Future programs must address how to meet the health needs of the poorest members of society, while simultaneously promoting self-sufficiency. Chapters 12 and 13 touch on these issues by outlining methods for calculating human resource needs and introducing options for financing the program so that it can be sustained for future generations.

Chapter 14 is an overview of the core curriculum for training Volunteer Health Sisters. Chapters 15 through 21 are the 7 core curriculum modules:

1. **Personal Hygiene and Environmental Sanitation**
2. **Control of Diarrheal Diseases**
3. **Immunization**
4. **Nutrition**
5. **Common Cold and Pneumonia**
6. **Safe Motherhood**
7. **Injury Prevention and First Aid**

The modules have been organized to address the preventive health aspects of each health problem, household treatments, and signs and symptoms that require a medical referral.

Although the Afghanistan Health Sector Support Project has been completed, we hope that the availability of this Manual and the many enthusiastic staff who participated in the pilot Volunteer Health Sister Program will enable health care workers in Afghanistan and elsewhere to expand on the VHS pilot Program and build upon its lessons to help improve the health of women and young children.

Readers interested in further details about the AHSSP may be interested in reading the technical companion volume, *Health Care in Muslim Asia: Development and Disorder in Wartime Afghanistan.* Project technical staff contributed chapters on securing the support and collaboration of donors and nationals, designing cross-border services, logistics and financial management, developing a health program for women and children, and planning for sustainability and impact. Professional technical guidance and insights are interspersed with vignettes that graphically convey the excitement and challenges of providing basic health services within a war-torn environment. Single copies are available on request to readers from developing countries and non-profit organizations by writing to the President's Office at MSH.

Part I

CHAPTER 1

Rationale for the Volunteer Health Sister Program

The need for Volunteer Health Sisters

According to UNICEF's *State of the World's Children: 1993,* Afghanistan has the world's third-highest rates for infant mortality (165 per 1000), deaths of children under 5 (257 per 1000), and maternal mortality (640 per 100,000 live births). Moreover, women and children together comprise approximately two-thirds of the population of the country.

A pilot Volunteer Health Sister Program was begun in 1991 in rural Afghanistan to improve the health status of this vulnerable and large segment of the population. The Program aims to extend access to maternal and child health information and services to women in a manner that respects Afghan culture and tradition. Through the Volunteer Health Sister Program, women can share health knowledge with other women in the community, treat simple illnesses, and know how and when to seek help from other health workers.

The pilot program initiated in Afghanistan was modeled after the successful "Urban Volunteer Program" started in the early 1980s in Dhaka, Bangladesh. Women in the inner city slums of Dhaka were taught focused child survival health education messages, including interventions for diarrheal disease, malnutrition, vaccine-preventable diseases, and, to some extent, child-spacing. Urban Volunteers learned home treatment skills and how to recognize the signs and symptoms of maternal and child health problems requiring referral. A study of the impact of the Urban Volunteers in Dhaka, which specifically focused on the impact of volunteers on mothers' knowledge of diarrhea prevention and management, suggested that urban volunteers can effectively influence mothers' knowledge of diarrhea prevention and use of Oral Rehydration Therapy (Hel Baqui et al., 1993).

Unlike the Afghan Volunteer Health Sisters, the Urban Volunteers in Dhaka were from densely populated communities. However, they were also Muslim (although from a very different sociocultural milieu than in Afghanistan); and, like Afghan women, most of the Volunteers in Dhaka were non-literate. The Urban Volunteer Program was not only the core of a grassroots outreach system, it was also a cadre of health workers who could be mobilized to assist in health emergencies. During the critical disease transmission periods of the seasonal floods, for example, the Urban Volunteers delivered ORS to their neighbors.

A greater impact on health could be made if everyone in the community learns and understands key health information, along with the VHS. For example, the Volunteer Health Sister curriculum can be used in schools to provide health education to children, or the curriculum's prime health messages can be disseminated through the mosque in order to extend important health knowledge to male family members.

Definition of a Volunteer Health Sister

What does a Volunteer do?

A Volunteer Health Sister is a woman (literate or non-literate) who is given knowledge and skills to deal specifically with the health problems of women and children in their households as well as in their extended family or community at large, and to work in close relationship with the health services. (See Chapter 5 for her specific tasks and responsibilities.)

The name "Volunteer Health Sister" was derived from the Afghan concept that every woman is a sister to others in the community, and that as a sister, she shares and helps others as a family member would. In most Afghan communities, women truly are related by birth or by marriage and the entire community consists of several extended families.

Definition of a Trainer/Supervisor

What does a Trainer/ Supervisor do?

A Trainer/Supervisor is usually a clinician at the local health facility who has been selected to set up and manage the local VHS Program. The selection of Trainer/Supervisors will be carried out by the provincial, regional, or national level Ministry of Health authorities or by a non-governmental organization that is setting up a VHS program. Selection should be based on the motivation of the proposed individual, on the success of the clinic in providing quality health services, and on plans for targeting populations with the greatest health needs.

A Trainer/Supervisor may be either male or female. Female staff who work at MCH facilities have greater access to community women who are potential volunteers, but there are far fewer MCH clinics in rural areas than there are Basic Health Centers, which are staffed by male medical staff. All Trainer/ Supervisors should undergo training on how to set up and run the program (see Chapter 6, "The Training System").

The Trainer/Supervisor's responsibilities encompass both training and supervision of Volunteer Health Sisters. Eventually the Trainer/Supervisor may delegate some supervisory tasks to others as the program expands, but those who assist in supervision will still need support and oversight from the key Trainer/Supervisor.

What is a Volunteer Health Sister Program?

Components of a Volunteer Health Sister Program

A VHS Program is a community health program that uses primary home care as the basis for health intervention. A woman who is trained as a Volunteer Health Sister is the center of the Volunteer Health Sister Program. In order for her to effectively do her job, she must be well selected, trained to master essential skills, sufficiently supplied, regularly supervised, and supported by the community, as well as closely linked with other health workers in the primary health care system.

The success of the program also requires a sufficient number of Volunteer Health Sisters in the community to improve the knowledge, skills, and practices of different households; a mechanism for supply and resupply of Volunteer Health Sisters with kits to effectively carry out their work; and financial inputs to train, supervise, and supply Health Sisters and Trainer/Supervisors over the short term and long term.

All of these components and management systems function together to improve the health status of women and children and constitute the Volunteer Health Sister Program.

Rationale for a Volunteer Health Sister Program

A low cost solution to promote preventive health care in the home

Like other community health programs, the Volunteer Health Sister Program is based on recognition of the need for:

- Low cost household and community-based solutions to health problems to assure sustainability of health interventions in poor communities
- Targeting poor women for preventive health strategies, since they are the caretakers of children and the family
- A focus on preventive health services while simultaneously providing a balance of curative care
- A link between household and the formal primary health care providers and facilities

The Volunteer Health Sister Program is different from village health worker or community health worker activities because:

- It meets the need to target women specifically, since women from the community are the most effective outreach workers to reach other women and to encourage them to practice healthy behaviors.
- Volunteer Health Sisters are not paid by the formal health care system, although they may receive incentives in the form of gifts or special privileges.
- The Program focuses on the household. It aims to alleviate health problems that can be prevented or initially treated in the home by mothers or other family members.

The distinction between volunteers and other community health workers

The terms "Volunteer" and "Community Health Worker" are often used interchangeably. The dictionary defines volunteer as "a person who performs or gives his services of his own free will". Others who have been labeled as community health workers sometimes receive financial or in-kind recompense for their services and sometimes do not (Silimperi, 1994), resulting in confusion about the two terms.

Uniqueness of volunteers

There are several distinctions between these two providers in the community-based primary health care system. Educational qualifications for Volunteers are minimal; volunteers may be non-literate. The hours of service of a Volunteer must be flexible and limited in amount because she does not receive any regular financial or in-kind payment. Consequently, the number of health education sessions that a Volunteer gives or the number of referrals she makes should consider this flexibility of hours. If a higher level of output is required to effectively meet the needs of the community, such as more health education sessions, more Volunteers can be added to the system, rather than expecting the Volunteer to increase the amount of time she spends. The number of Volunteers needed to provide a community with quality care will therefore depend on such factors as women's mobility, the epidemiology of the area, and individual productivity levels. Finally, the focus of the Volunteer is the household.

Characteristics of volunteers

By contrast, in most countries Community Health Workers have at least some primary education and are literate. Their position requires more formal educational qualifications and longer training as a health worker. Their medical supplies are more sophisticated and they can diagnose and treat a broader range of illnesses than a Volunteer. Community Health Workers tend to have fixed hours of duty and regular salaries. The number of such workers is calculated more strictly in terms of population size.

In Afghanistan, the male Basic Health Worker (BHW) must have a minimum of 6th grade education as a prerequisite to beginning training as a BHW. A BHW is an outreach worker, but his focus is the community at large and he often works from his base in a clinic with medical staff or from his own "health post". Initial training of Afghan BHWs lasts three months, with classes 6 days per week, whereas Volunteers initially attend 2-hour sessions several times per week over a period of 6 months. While funds were available through the AHSSP, BHWs received a salary for their work. It is not clear whether funds will continue to be available to pay regular salaries.

Exhibit 1.1

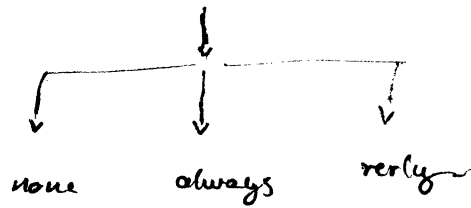
Distinctions Between Volunteers and Community Health Workers

"Volunteer"	**"Community Health Worker"**
May be non-literate	Must meet established educational requirements
Does not receive financial payment	Usually receives financial payment
Works flexible hours	Works regular hours
Focuses on the household and is based in the household	Focuses on the community at large and is often based at a health facility
Attends informal training sessions	Attends formal training course

The distinctions presented in Exhibit 1.1 are important because Volunteer Health Sisters, Female Health Workers (trained dais), and Basic Health Workers all work at the community level of the Afghan primary health care system (see Chapter 2: "The Relation of the Volunteer Health Sister to the Primary Health Care System"). Volunteer Health Sisters and Female Health Workers work within a more informal, flexible context than Basic Health Workers, who are considered an extension of the formal primary health care system.

All require incentives of some sort; all require appropriate training and supervision, but the volunteer systems require a more flexible management approach.

Exhibit of next page!



CHAPTER 2

The Role of the VHS in the Primary Health Care System

What is the structure of the formal health care system in which the Volunteer Health Sister works? What is the difference between the tasks of a Female Health Worker (trained dai) and a Volunteer Health Sister? Who is responsible for coordinating health activities of the health team at the district level? How do Volunteer Health Sisters form a network to strengthen the foundation of the primary health care system? These are important questions to answer in order to avoid confusion and to assure maximum utilization and effectiveness of the Volunteer Health Sister.

The Afghanistan Primary Health Care (PHC) System

What is Primary Health Care?

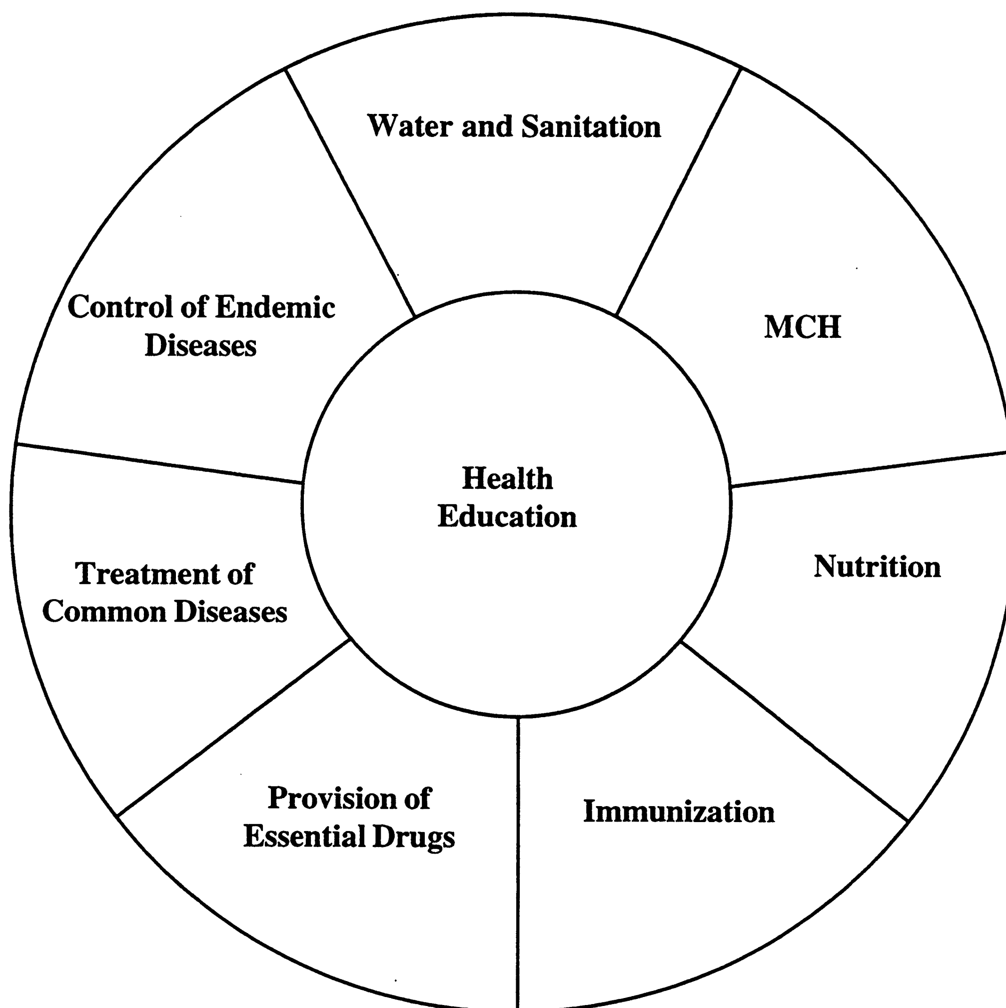
"Primary Health Care" can be defined as "essential health care made universally accessible to individuals and acceptable to them, through their full participation and at a cost the community and country can afford." The key components of primary health care, as shown in Exhibit 2.1, include MCH (including Safe Motherhood and family planning), nutrition, immunization, control of endemic diseases, treatment of common diseases, provision of clean water and sanitation, and provision of essential drugs.

The system in Afghanistan

The Afghanistan primary health care system is based on a foundation of community-level health services, which refer to and are supervised by formal health care workers at Basic Health Centers and MCH Clinics at the sub-district level. Comprehensive Health Centers, which should be available at the district level, are fewer in number than facilities at the sub-district level, but they offer a more complete range of services than simple clinics. Primary care hospitals, also known as "first referral hospitals," are the next level in the primary health care pyramid. First referral hospitals serve as the main referral point for pa-

Exhibit 2.1

Primary Health Care (PHC) Components

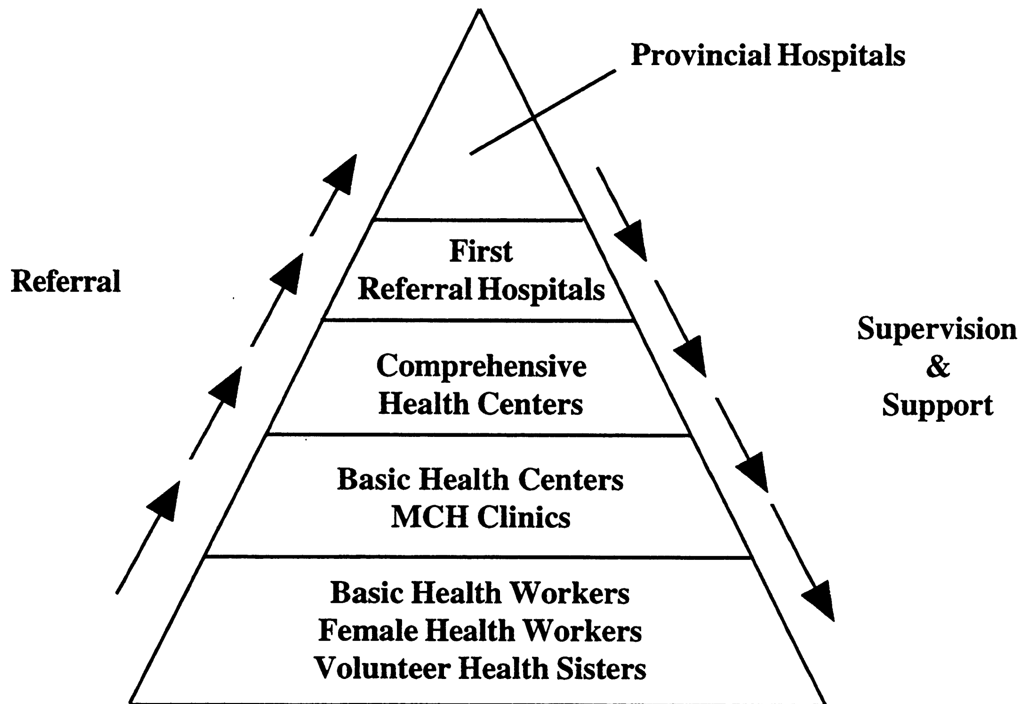


tients from Comprehensive Health Centers, Basic Health Centers and MCH Clinics; there may be several such hospitals within a province.

The number of Basic Health Centers, Comprehensive Health Centers, first referral hospitals, and provincial hospitals is not static at this time due to the variability of donor funds. Exhibit 2.2 demonstrates how the health pyramid is based on a foundation of community-level workers which supports increasingly fewer, but more sophisticated, levels of health care.

Exhibit 2.2

Afghanistan Health Pyramid



Community level health services: Volunteer Health Sisters, Female Health Workers, and Basic Health Workers

Types of health workers in the community

The foundation of the primary health care (PHC) pyramid in rural Afghanistan is the community health worker. In Afghanistan there are three major types of trained health workers in the community, although the VHS and FHW also may have a local Supervisor:

1. Volunteer Health Sister (VHS): based in the home
2. Female Health Worker (FHW): based in the home
3. Basic Health Worker (BHW): based in the home, in a "health post", or possibly in a clinic with more highly trained providers

It is important to understand the basic distinctions between each type of worker and health facility so that patterns of referral and coordination become clear.

Volunteer Health Sister

In order to improve access to health information and services for women in Afghanistan, it is important to have community workers who are women as well as male community health workers. Therefore, **the Volunteer Health Sister is a woman who serves as the first line of care for women and children** in the prevention of most illnesses, for referral of cases presenting danger signs, and for treatment of diarrhea and home care for sick children. A Volunteer Health Sister should work together with traditional healers, Female Health Workers, and Basic Health Workers as a team.

The pilot VHS Program has about 150 Volunteers currently active as of writing of this manual in early 1994. They are working in Baraki Barak District of Logar Province, Sorkhroad District and Mohmandara District of Nangarhar, Asmar District of Kunar Province, Taloqan District of Takhar Province, Qarabagh District and Malistan District of Ghazni Province, and in Khost District of Paktya Province.

Female Health Worker

The traditional birth attendant ("dai") in Afghanistan has traditionally assumed the role of the community health worker for women's health, although her services are usually used only at the time of a delivery. There are several terms for traditional birth attendants which reflect whether or not they have been trained. **Traditional birth attendants, or "dais" who have been trained in a comprehensive course based on *The Afghan Female Health Worker Manual* are called "Female Health Workers" in Afghanistan.** Female Health Workers have been taught to improve their knowledge, skills, and practices for assisting women in childbirth and to promote child survival and other aspects of preventive health. (*The Afghan Female Health Worker Manual* is a standardized curriculum which was developed by the United Nations High Commission for Refugees and which has been translated to Dari for use in Afghanistan.) Untrained dais should not be called "Female Health Workers" because they often do not have the proper skills or knowledge for safe deliveries or appropriate child care.

Over 2000 Female Health Workers have been trained in the refugee camps of Pakistan. Since roughly 85% of the refugee population in Pakistan were from the Pushtoon provinces of Afghanistan, the majority of these trained dais will likely be working in the southeastern border provinces of Afghanistan. Over 350 Female Health Workers were trained by the Afghanistan Health Sector Support Project between 1989 and 1993. They were trained at MCH clinics in the provinces of Badakshan, Bamiyan, Farah, Herat, Ghazni, Herat, Kabul, Kapisa, Kunduz, Laghman, Logar, Nangarhar, Paktya, Parwan, and Takhar.

Basic Health Worker

Basic Health Workers (BHWs), are literate, male health care providers (with a minimum 6th grade education) who have been trained to provide basic preventive community health education on topics such as water, personal hygiene, and environmental sanitation as well as essential care for common, potentially life-threatening conditions like diarrhea, malaria, and acute respiratory infections. They have a **broader range of skills and medical supplies** than the Volunteer Health Sisters and Female Health Workers. Planning for BHW coverage is based on a ratio of 1 BHW for a population of 5,000.

Over 1700 Basic Health Workers were trained and fielded by the Afghanistan Health Sector Support Project between 1987 and 1992. They work in nearly all provinces of Afghanistan, although there are concentrations of BHWs in particular areas. BHWs received a salary during this period, although all salary support was stopped in 1993 as the Afghanistan Health Sector Support Project began its phase-down.

Exhibit 2.3

Example of Cooperation and Referral Between the BHW and VHS

Khala Jan brought her 2 year-old son to Aziz Youssef, the BHW, because her child had watery diarrhea. Aziz Youssef took a brief history about the illness, treated the child with ORS, and showed the mother how to prepare the solution at home. He gave her several packets of ORS.

Mr. Aziz noticed that the child was malnourished, although he knew the family owned land and had sufficient resources to feed the family. Aziz discussed the importance of feeding a sick child. He also recommended to Khala Jan that she visit one of the Volunteer Health Sisters to learn more about how to make her son strong and healthy. He asked Khala Jan if she knew any of the Volunteers. She replied that one of her neighbors, Shawzia, was a Volunteer. Khala Jan said that she would visit Shawzia.

The next day, Aziz received another patient, a 4-year old girl with an upper respiratory tract infection. The child's mother said that the VHS, Shawzia, had told her to bring the child to Aziz because the child was too sick for Shawzia to treat. Aziz gave the child antibiotics. Later that day he asked Shawzia to make a home visit to follow up on the child. He also told Shawzia that Khala Jan planned to visit her, but if Shawzia had time it would be helpful if she made a home visit to Khala Jan's home.

Linkages between health workers at the community level

The BHW is the most highly qualified community health worker. He also is supplied with a broader array of pharmaceuticals and equipment (including mebendazole, paracetamol, cotrimoxazole, ampicillin, penicillin, metronidazole, gentian violet, benzyl benzoit solution, thermometers, and bandages) than a FHW or VHS. However, due to the sociocultural environment, the BHW rarely treats women's health problems and it is sometimes difficult to have sufficient access to village women to extend education about family health. The VHSs and FHWs, on the other hand, can relatively easily provide health services to other women and share health information. The BHW should therefore refer patients to the VHS for follow-up care and for in-depth health education. The BHW should build on the FHWs' capabilities by referring normal pregnancy cases to the FHWs (but should refer high-risk pregnancies to MCH clinics).

In general, the VHSs should also refer all normal pregnancy cases to the Female Health Worker. If the local traditional birth attendant has not been trained as a FHW, the Volunteer should not refer cases to her. Instead, the VHS should encourage the traditional birth attendant to participate in the VHS training to learn the basic information and skills for safe motherhood, or to participate in FHW training if it is offered.

FHWs can also cooperate with the VHSs by sending women to the VHS for health education discussions. The FHW is not equipped with health education posters and flip charts like the VHS. Although the FHW is a health promoter with a knowledge of personal hygiene and environmental sanitation, control of diarrheal diseases, immunization, nutrition, common cold and pneumonia, safe motherhood, and injury prevention and first aid, her role is not the same as the VHS. The VHS's role is to actively extend health education to others as an outreach worker.

Sub-district level health services: Basic Health Centers (BHCs) and Maternal and Child Health (MCH) Clinics

The next level in the PHC pyramid is the Basic Health Center and the Maternal and Child Health (MCH) Clinic; each ideally covers a population of 30,000. They are staffed by 2 to 4 mid-level health workers; sometimes a doctor assumes one of the positions. These facilities are the referral point for community workers. These clinics rarely have patient beds or laboratory services, but they are expected to serve as centers for immunization campaigns and, increasingly, for Volunteer Health Sister programs. In addition to the services provided at most Basic Health Centers, Maternal and Child Health Clinics provide prenatal, perinatal, and postnatal care; Female Health Worker training; and occasionally facility-based immunization. In some communities, Basic Health Centers and MCH Clinics may share facilities or be located in adjacent buildings. In other communities, they exist separately.

District level health services: The Comprehensive Health Center (CHC)

In the primary health care pyramid, the Comprehensive Health Center is above the Basic Health Center and MCH Clinic. Ideally, a Comprehensive Health Center will be staffed by a medical doctor, 1 or 2 advanced mid-level workers, and several other mid-level health workers. In general they should be equipped with 3 to 5 patient beds and a small field laboratory. It is envisioned that eventually these centers will develop specialized programs such as MCH services (including immunization), TB control, malaria control, and disability service, depending on local disease patterns, health needs, and availability of trained personnel.

In most countries, the district is the key level for the management of primary health care in a decentralized health care system. Ideally, all health-related activities taking place in the district should be coordinated into a district health system through a district health management team, led by a Rural Health Officer. However, in Afghanistan, the management of health services is more often undertaken by an officer covering several districts or provinces. In most cases in rural Afghanistan, the Comprehensive Health Center is the main government health facility at the district level, although some areas do have a district hospital.

First referral hospital

The next level in the PHC pyramid is the first referral hospital, which is expected to serve 1 to 4 districts, depending on population and geography. It should have 1 to 3 physicians on staff in addition to other hospital personnel. Most are expected to have 10 to 20 patient beds, a field laboratory, and portable X-ray capability. Some may offer major surgery capability.

Provincial hospital

Specialized medical services, most major surgical services, freeze point capability, community and mid-level health worker training, expanded laboratory services, prosthesis fabrication, and other more specialized services will be provided by provincial hospitals and a few regional referral hospitals located in major cities. They may have up to 50 beds, but will have fewer in more remote, less populous provinces.

The health team

Each health provider in the primary health care system should have a clear understanding of the job descriptions of other health workers in order to promote coordination and cooperation. (See "Job Descriptions" at the end of this chapter.) The people served by the health care system must understand the

different responsibilities and capabilities of each provider in order to use them correctly and most efficiently.

The health providers who form a referral network in any particular geographical area are called a "health team".

Exhibit 2.4

Example of a Health Team

In a village of Badakshan Province, there are two Basic Health Workers and one Basic Health Center supported with government funds. The Basic Health Center does not have a doctor, so referrals requiring a physician's care are sent to the nearest facility that has one. There is a Comprehensive Health Center 60 kilometers away with a fine physician, but there are several doctors working at the first referral hospital only 20 kilometers away who gladly receive patients from the Basic Health Center.

The Basic Health Worker occasionally accompanies patients requiring emergency care to the hospital. The hospital staff coordinate with the Basic Health Worker and staff of the Basic Health Center to arrange days when the mobile vaccination team will visit the village. The vaccinators meet with the health center staff upon their arrival and work with them and the Basic Health Workers to target families requiring vaccination services.

One of the nurse-midwives at the hospital has informed a nurse at the Basic Health Center about a new program to train village women as Volunteer Health Sisters. The nurse-midwife promises to find out more about the program.

The Volunteer Health Sister network

Networks promote support and exchange among volunteers

In order to foster support and exchange among Volunteer Health Sisters, meetings should be held at least quarterly for all Volunteers in the area of the health facility. This meeting can be multi-purpose for collecting monitoring tools, resupplying kits, giving refresher training, and for providing an opportunity for Volunteers to meet and discuss their work. At least every 6 months, a special meeting should be held at which Female Health Workers and other health providers are also invited to discuss their problems, proposed solutions, and role as a health team with the Volunteer Health Sisters, their Supervisors, and trainers. Volunteer Health Sister Supervisors should have a similar network and meeting schedule for themselves to promote sharing and cooperation on a regular basis.

Lines of authority, cooperation, and referral

The specific lines of authority, cooperation, and referral within a village will depend on the availability of services in each locality. Theoretically, in an area without a MCH facility the BHC or CHC should supervise BHWs and VHSs trained at that facility. In areas where there are MCH Clinics as well as BHCs and CHCs, the BHCs and CHCs should supervise the BHWs; the MCH Clinics should supervise the VHSs and FHWs. It is very rare to find an area where there is an MCH clinic, but no other health facility.

In many districts of Afghanistan, however, there are no MCH facilities, or there may be no Basic Health Workers. A Basic Health Center may be a journey of 2 days away for many villagers. Emergency referrals for surgery often necessitate access to a hospital but geography and climatic conditions are obstructive. Volunteer Health Sister programs are established through health facilities, and therefore are guaranteed some support by the clinic level of the system.

The Trainer/Supervisors at each facility should know and explain to the Volunteer Health Sisters where different cases can be referred. If the nearest MCH clinic is over 3 hours away by vehicle, the Trainer/Supervisor should clarify which cases should be sent directly to the nurse-midwife or MCH Officer at the MCH clinic and which cases should be sent directly to the Basic Health Center, which may be 30 minutes away in the opposite direction.

The link between the formal and the informal health care systems

The VHS can be a key link between the traditional and the modern health systems

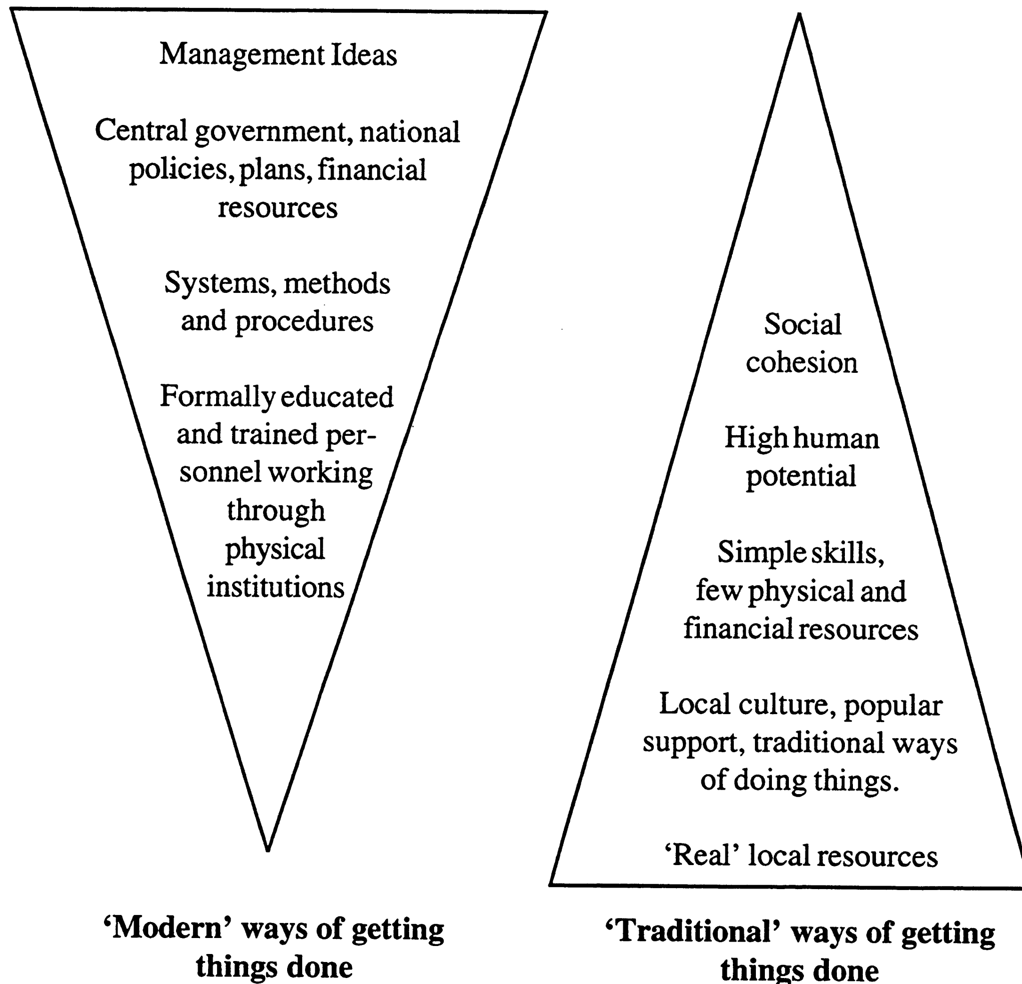
Two major systems influence primary health care: the traditional, informal health care system and the formal health care system. Successful primary health care requires the ability to understand and work within both systems.

As shown in Exhibit 2.5, the modern, formal health care management system, with its strength in national and regional governmental policies, plans, resources and organization, works through health facilities to have an impact on community health. The informal health care system, with its strength widely distributed in local communities, offers social cohesion, popular support, local resources, and high human potential. The informal system works through community participation and focuses on the home and community to improve health (Amonoo-Lartsen, 1991).

The formal health care system relies on monetary incentives, prescribed working hours, and fairly well-educated health care providers. The informal system relies on non-monetary incentives, flexible working hours, and non-literate or minimally educated health providers.

Exhibit 2.5

Comparison of the Modern and Traditional Health Care Systems



The Volunteer Health Sister can be a key link between the traditional ways of dealing with health problems and the medical approach to illness and disease. She can communicate easily with local people. She can enable traditional healers to learn useful new practices in a way that does not threaten the effectiveness of the traditional culture and values. For example, faced with an anemic patient who has sought the services of the mullah, the Volunteer Health Sister can suggest a diet rich in iron to the woman to complement the traditional provider's advice.

Exhibit 2.6

Job Descriptions of Key Health Providers at the District Level of the Primary Health Care System

In addition to doctors, nurses, and medical technicians who staff health facilities, there are several categories of personnel which have been trained specifically for the rural primary health care system. Job descriptions of key health providers follow.

Volunteer Health Sister (VHS) (see Chapter 5, "Volunteer Health Sisters' Responsibilities")

Volunteer Health Sister Supervisor (see Chapter 7, "The Supervision System")

Female Health Worker (FHW)

1. Visit pregnant women regularly to advise on health care during pregnancy
2. Motivate pregnant women to seek prenatal care at the MCH clinic, or at the Basic Health Center if there is no MCH facility nearby
3. Promote immunization against tetanus for pregnant women
4. Carry out a safe normal delivery
5. Recognize early signs of complications in pregnancy and labor and after delivery, and to refer to the appropriate provider (MCH Officer, nurse-midwife, or doctor) as necessary
6. Manage any perinatal complications until referral is possible
7. Improve care of the mother and baby after delivery and make regular home visits for follow up
8. Promote personal hygiene and environmental sanitation; immunization; control of diarrheal diseases; and prevention, care, and referral as appropriate for fever and respiratory infections

Female Health Worker Supervisor

1. Carry out the tasks of a Female Health Worker, but limited in amount to allow time for the other responsibilities below
2. Help the MCH clinic staff supervise the Female Health Workers
3. Support, advise, and assist the Female Health Workers by making regular home visits
4. Assist the Female Health Workers in reporting information as required by the MCH Clinic, such as births and deaths
5. Assist with the resupply of equipment to the Female Health Workers

Continued

Continued

6. Attend the MCH clinic 2 days every week and assist the MCH staff in prenatal and postnatal clinics; the rest of the time to be spent working within the community
7. Follow up referrals made by the FHW and trace defaulters

Basic Health Worker (BHW)

1. Promote and develop health services at the community level
2. Prevent and treat common clinical problems, including skin diseases, intestinal parasites, diarrhea, common cold and pneumonia, conjunctivitis, and anemia
3. Provide first aid for injuries
4. Manage a health post
5. Promote child survival and Safe Motherhood through health education to the community
6. Assist in reporting of health information as required by the health facility

Maternal and Child Health Officer (MCHO)

1. Carry out the same activities as a Basic Health Worker PLUS
2. Promote and provide prenatal, natal, and postnatal care, including

   Manage normal pregnancy, labor, and delivery

   Recognize, treat, and refer complications in pregnancy, labor, delivery, and in the postnatal period
3. Train and supervise Volunteer Health Sisters and Volunteer Health Sister Supervisors
4. Train and supervise Female Health Workers and Female Health Worker Supervisors
5. Promote family planning and counsel on the proper use of contraceptives
6. Manage an MCH clinic

Rural Health Officer (RHO)

1. Supervise Basic Health Workers at the district level
2. Support primary health care; coordinate and supervise health education and preventive health programs (including immunization campaigns and Volunteer Health Sister Programs) at the district level

Continued

Continued

3. Administer the Ministry of Public Health's (MOPH) activities at the district level, assuring that MOPH policy is carried out
4. Collect, collate, and report on data collected from health posts and clinics to present to the Ministry of Public Health
5. Provide logistic support to Basic Health Workers, health facilities, and other members of the health system as required
6. Establish linkages with communities and other non-medical sectors to coordinate and focus health activities
7. Promote the MCH activities (including the Volunteer Health Sister Program) among community leaders
8. Foster linkages between members of the health team (VHSs, MCHOs, BHWs, clinic staff, and the RHO)

Exercises

Exercise 1

Lines of Authority, Cooperation, and Referral

Case Studies

Directions: Divide the class into small groups of 4. Assign half of the groups to read and answer questions to case study A. Assign the other groups to read and answer questions to case study B. Then, ask the first group to present case study A, and the second group to present case study B to the entire class.

Case A Gul Ahmad is a farmer with a wife and 5 children. Every morning after the first prayer he goes out to attend to the sheep and land. This winter is extremely cold and it is difficult to keep the house warm. His daughter, Khalida, has been coughing for 3 days and she seems to have a fever. There is a Volunteer Health Sister about 3 kilometers away, a Basic Health Worker across the river (about 10 kilometers away on foot), and a Basic Health Center also about 3 kilometers away, but Gul Ahmad has heard that it is closed for the week. There is another clinic about 25 kilometers away in the district center.

1. What should Gul Ahmad do?

Continued

Continued

2. What is the Volunteer Health Sister's responsibility if Gul Ahmad brings Khalida to her?
3. What should the Volunteer Health Sister do if Khalida's breathing is very rapid?

Case B Farida is a poor woman with 8 children living in Hajee Zai village. Her oldest child is about fourteen years old and the youngest is only 1 year old. With the work of caring for the household and taking time to breast feed, she never has a moment to rest. For the last 3 months, she has felt there may be another baby inside. Her cousin Fatima is a Volunteer Health Sister living nearby. The MCH clinic 6 kilometers away has an MCH Officer, but there is a dai in the village. Farida visits Fatima to tell her about her suspected condition.

1. What should Fatima discuss with Farida?
2. Should Farida refer Fatima? If no, why not? If she should refer Fatima, to whom and why?
3. If Fatima is indeed pregnant, who should assist in the delivery? Why?

Time: 40 minutes

Materials: Case studies; flip chart and markers or chalkboard and chalk

EXERCISE 2

COOPERATION IN A VOLUNTEER HEALTH SISTER NETWORK

QUESTION AND ANSWER/DISCUSSION

Directions: Explain that a VHS network provides an opportunity for information exchange as well as cooperation among Volunteer Health Sisters. Ask the class the following questions and discuss the answers.

1. How can Volunteer Health Sisters support one another?
2. What can the Trainer/Supervisor do to foster cooperation between Volunteer Health Sisters?
3. What can the Trainer/Supervisor do to foster cooperation between Volunteer Health Sisters and traditional healers, Female Health Workers, and Basic Health Workers?

Time: 15 minutes

Materials: None

EXERCISE 3

CONFLICT RESOLUTION AMONG MEMBERS OF THE HEALTH TEAM

INDIVIDUAL ROLE PLAY WITH QUESTION AND ANSWER/DISCUSSION

Directions: Divide the group into pairs to carry out the role play. At the conclusion of the role play, return to a large group. Discuss the issues and methods of resolving conflict among members of the health team.

1. What is the problem?
2. What could have prevented the problem?
3. What should the Trainer/Supervisor do as the authority figure and as the Supervisor of the BHW and the Volunteer Health Sister?

Roles: 1 Trainer/Supervisor, 1 Basic Health Worker

Situation: The Basic Health Worker is angry because one of the local Volunteer Health Sisters has referred several patients to him who were too sick for him to treat. When the BHW referred the patients on to the doctor-led clinic, the families of the patients became very upset with the BHW. They had come to his post because the Volunteer had assured them that the BHW would provide medicine. They had wasted time and transport money trying to reach the BHW. The BHW tells the Trainer/Supervisor that Volunteer Health Sisters only make trouble for the community.

Time: 30 minutes (15 minutes for role play, 15 minutes discussion)

Materials: None

CHAPTER 3

The Community

What is a community?

A community is a group of people with shared interests and concerns who often live in the same locality. It is often characterized by common:

Definition of a community

- History
- Language
- Religion
- Beliefs
- Culture and traditions
- Values

Authority in a community varies. In some communities religious leaders have the most power, while in others the tribal chief makes key decisions with the advice of the elders. It is essential to identify the members of the community to be served by the Volunteer Health Sister Program and to identify the community leaders in the area before establishing a Volunteer Health Sister Program.

Why is it important to involve the community?

It is essential to have a primary health care infrastructure complete with health facilities to adequately provide for the health needs of a population. However, since only 10 to 20% of the population in most developing countries has ready access to the formal health care system, it is also essential to involve the community in health system development so that the community can help provide for itself.

Strong community involvement promotes sustainability

Health is not just a service; it is a state of well-being. If the community is involved in decision making, planning, implementing, and evaluating health programs, as well as providing staff and materials, the people in the community become responsible for their own well-being. For this reason, the primary health care system based on strong community involvement will be more sustainable than a formal health care system that relies only on health facilities to provide services.

How to involve the community

Introducing the VHS Program to the community

Introducing the Volunteer Health Sister Program to the community is the critical step in starting a new program. If the community leaders or members do not fully understand the concept of the Volunteer Health Sister, it is possible that the community will not support the program's activities. At worst, someone could attempt to sabotage the program; for example, if a traditional healer perceives it as disruptive to his role in the community.

The relationship between community members, staff of the health facility, and Volunteer Health Sisters must be one of mutual trust, unified purpose, and cooperation. The task of each Volunteer Health Sister Trainer/Supervisor is to initiate and encourage this cooperation by correctly introducing the concept of the Volunteer Health Sister and the underlying rationale to the community.

Community motivation can be fostered by emphasizing the following key facts about Volunteer Health Sisters. They are:

- Women who help families (especially women and children) who need health information and services
- Health care providers; since most formal health care providers are male, Volunteer Health Sisters are necessary to extend maternal and child health care to those who need it most
- Volunteers; they do not charge for their services

The four steps to involve the community in the Volunteer Health Sister Program are outlined below.

STEP 1: **Identify the community leaders, introduce the Volunteer Health Sister Program to them, and reach agreement on its benefits as well as on respective roles and responsibilities.**

Community leaders can give people confidence about the program

The first step in starting a Volunteer Health Sister Program in a community is to identify the leaders, explain the concept of the program to them, gain their support, and discuss the responsibilities of the community towards the Volunteer Health Sisters (see Chapter 5, "Volunteer Health Sisters' Responsibilities"). Leaders may be political or religious leaders, or individuals who simply are well respected or powerful in the community. People in the community who are unfamiliar with such a new program may hesitate to allow their wives or daughters to participate. Community leaders can give the people confidence in the VHS Program if they fully understand its goal and approach. A successful program owes part of its success to the fact that the community authorities have enthusiastically endorsed the program.

To introduce the program to the leaders, the following sub-steps should be followed:

1.1 **Identify the community to be served** by the Volunteer Health Sister Program in terms of geographical boundaries, type of population (ethnic groups, high-risk populations, etc.), and size of population. One should identify the community (or communities) to be served during the first year of the program as well as those to be included as the program expands over several years.

1.2 **Introduce the key facts of the Volunteer Health Sister Program and the underlying rationale for the program** (see Chapter 1, "Rationale for a Volunteer Health Sister Program).

1.3 **Explain the benefits of the program,** including the health benefits of preventing illness and treating sickness early; improved access to health services by bringing services into the home; the low cost of Volunteers; and community self-sufficiency.

1.4 **Describe the responsibilities of the Volunteer Health Sister** (see Chapter 5, "Volunteer Health Sisters' Responsibilities") **and of the community**, including the willingness of the people to take responsibility for the program. Emphasize the mutual support required to have a successful program.

1.5 **Discuss potential community resources** which the community is willing to contribute to carry out VHS activities.

1.6 **Discuss any concerns** the leaders may have. Do not try to force them to accept the program; allow them an opportunity to discuss it further. Set a time to meet again, if necessary.

STEP 2: Introduce the program to the community at large—staff at other health facilities, families, traditional healers, teachers, and others.

The benefits of the Volunteer Health Sister Program can be communicated to the community through formal and informal channels. The community authorities can lead discussions about the program with the community elders or with heads of the households. The Volunteer Health Sister Trainer/Supervisor, based in the clinic, can discuss the purpose and advantages of the program with patients, or begin with his or her own extended family. The Trainer/Supervisor can visit families to assess their feelings towards health care and encourage interest in the Volunteer Health Sister Program. The best combination and order of these approaches depends on the type, size, and characteristics of the individual community.

Use of formal and informal channels of communication

You should follow these sub-steps:

2.1 **Identify who should be informed initially.**

2.2 **Decide how to inform the various members of the community and prepare a schedule of meetings.** These meetings can be large or small meetings after Friday prayer, at social events, or at individual, face-to-face meetings.

2.3 **Follow the same key steps** as above in Step 1, points 1.3 through 1.5.

2.4 **When discussing the program with traditional healers and formal health providers, clarify the role of the Volunteer Health Sister.** Assure them that the Health Sister's role is one of cooperation; she is not usurping their responsibilities (see Chapter 2, "The Relation of the Volunteer Health Sister to the Primary Health Care System").

2.5 **Encourage those who support the program to promote it among others.**

STEP 3: Make a map of the area to be served by the program.

The purpose of mapping

Making a map of the target community is an important step in order to understand the community's layout, to identify existing resources for the Volunteer Health Sister Program, and to identify target families. Later on, the map will become useful to monitor and evaluate the program. The map should contain information about the locations of:

- the population
- the target population needing services; i.e., the specific population intended as beneficiaries of the program—households with pregnant women and/or children under age five
- health and educational resources
- places where Volunteer Health Sisters currently serve or could best serve the people

Use this information to explain the program to community leaders; it will help convince them of the need for Volunteer Health Sisters.

To make a map, follow these sub-steps:

3.1 **Discuss sources of existing information** with key people, including the local leaders, teachers, Basic Health Workers, nurses or mid-level medical personnel, and others. If a map already exists, it can be copied and used as a starting point.

3.2 **Select a mapping team,** including the Trainer/Supervisor, Basic Health Worker, local dai, or others. The team can promote the program during the process of making the map. Select people who can be effective promoters!

3.3 **If no map exists, start to draw one.** If the village or town is very large (over 250 families), it is only necessary to map the area of the communities to be served by the program.

3.4 **Determine the borders** of the community, village, town, or area that will be included in the map.

3.5 **Use natural geographic borders** (rivers or streams, mountains or fields) whenever possible because they are less likely to change. Man-made borders (roads, bridges) are also useful if they are clearly defined and named. Use formal names as well as local names.

3.6 **If the area to be mapped is too large** to draw on one sheet of paper, **divide the area into sections** with clear borders. These section borders do not have to be permanent, geographic borders because they will be used only during the mapping process. Community-made maps should usually be small area maps; do not try to fit an entire town on one page.

3.7 **Use the symbols** in Exhibit 3.1 to indicate important structures or landmarks, and include a **"key"** that describes the symbols. A key provides a brief explanation for the symbols used on the map. Create additional symbols if necessary, and include them in the key. Mark all information that is useful for the program, especially for targeting women and children. You can make up new symbols for features such as:

- Families with children under age 5
- Pregnant women
- Health providers (formal and traditional)
- Transport
- Informal meeting sites

3.8 **Mark approximate distances** between important geographic points using kilometers, "paces", or a time measure (walking distance in minutes). Use the same distance measure throughout the map; do not mix kilometers and time measures, for example.

3.9 **Always write the date** the map was created on the map. Update the map as the community or the program changes, and write the date of revisions on the map.

3.10 **Write the names and titles of the mapping team members** on the map, for both the original and revised maps.

Exhibit 3.1

Key Symbols for Maps

House with Family	Bus Stop
House with Children under 5	Paved Road
House with Pregnant Women	Unpaved Road
Empty House	Footpath
Leader's House	Bridge
VHS's House	Footbridge
Traditional Healer's House	Bazaar
Health Center	Field
School	Mountain
Government Administration	River
Well	Stream
Latrine	Pond
Other	

STEP 4: Conduct a needs assessment.

How to meet the health needs of the people

It is important to think about what the Volunteer Health Sister Program will require and how it will best meet the health needs of the people before implementation begins. To do this, consider the following:

- **Felt needs:** what people feel are their biggest health problems.
- **Real needs:** solutions for health problems which will contribute to better health status in a lasting way.
- **Willingness:** readiness of people to take the responsibility for action.
- **Resources:** the persons, skills, materials, and/or money needed to carry out the activities decided upon.

As a simple example of how each of these factors can be important, suppose that a mother whose child frequently has diarrhea comes often to a clinic complaining of the diarrhea and seeking help.

- Her **felt need** is to stop the diarrhea.
- Her **real need** is to have essential knowledge about personal hygiene and environmental sanitation to prevent diarrhea.
- To stop further cases of diarrhea, she must be **willing** to wash her hands, cover food, etc.
- One **resource** that may help her is information from the Health Sister about hygiene and sanitation so she can protect her child from diarrhea.

To develop, conduct, and use a needs assessment, the Volunteer Health Sister Trainer/Supervisor should follow these sub-steps:

4.1 **Prepare a list of questions to use for the needs assessment** to determine the most important health problems and biggest concerns of the target population. A needs assessment is an analysis that studies the needs of a specific group, presents the results in a detailed manner (such as training needs or needs for health services), and identifies the actions required to fulfill these needs, for the purpose of program development. A sample list of questions to help gather this information follows at the end of this chapter, but these can be modified. There may be important questions specific to a particular village which should be included, and some of the sample questions may not be relevant.

4.2 **Carry out the needs assessment by asking the questions of representative groups of community members** (including leaders, mothers, fathers, traditional and formal health practitioners, and poor and wealthy families). A needs assessment can be carried out:

- One-on-one with individuals: This method is useful when it is important to obtain information from a selected individual or selected list of individuals, or from people who may be too shy or hesitant to speak in a group.
- In small groups using a list of questions: A questionnaire can be administered to a small group to get answers to a concrete set of questions and to get a range of responses, possibly quantifying the responses by how many people gave each response.
- In a "focus group": Focus groups are planned and guided by a specially trained interviewer who leads a discussion with five or six individuals for the purpose of examining a particular issue. Rather than simply asking a list of questions, the focus group leader guides the natural discussion of the group and probes to cover a set of predetermined issues, for example, exploring men's attitudes toward child-spacing, or finding out what VHSs find most rewarding about their work.

Use these **interviewing principles:**

- **Select a time that is convenient** for respondents. Limit the interview to one hour at most.
- **Select a place that is free from distractions,** so people can think and respond without interruptions.
- **Select a variety of respondents** for conducting an assessment. If you interview only community leaders, the perspective of women in the household will not be apparent, and vice versa.
- **Make clear the purpose** of the assessment and the need to select a sample rather than interview the entire population. Certain individuals may wonder why they have not been invited to be interviewed. One can usually avoid problems by explaining the reason or by conducting another individual or group interview.
- **Guide the discussion so that it does not go too far from the issues the assessment seeks to analyze; allow all participants in a group to express their views.** Avoid allowing any one person to dominate the discussion in a group setting.
- **Always conduct an interview in a polite manner**. Do not belittle anyone who answers a question with a strange or comical answer.
- **Do not bias (influence) responses** by asking leading questions such as, "Don't you think that the main health problem in our village is...?" A better question would be, "What do you think are the main health problems in our village?"
- **Probe for underlying issues, beliefs, and facts**. For example, if someone states, "if the clinic was better, fewer people would be sick all

the time," the interviewer should probe further to ascertain the underlying reasons for dissatisfaction with the clinic; one could ask, "Why do you say that?" or, "How should the clinic be improved?"

4.3 **Summarize the results of the needs assessment** in a written statement. Identify the health needs (such as too many children dying of diarrhea, or lack of latrines) and prioritize them. The needs assessment contains some quantitative information, but mainly qualitative questions. You will want to summarize results by describing the most common responses among each type of individual or group, the most emphatic or sensitive issues, and the range of responses.

STEP 5: Incorporate assessment results into an action plan.

Use the results of the needs assessment to identify the actions required to address these health needs and to focus subsequent training of the Volunteer Health Sisters.

Turning assessment results into action

The assessment results help the Trainer/Supervisor to understand the felt health needs, real health needs, and the willingness of the community to solve their problems. The results can be shared with community leaders to actively involve them in identifying and organizing community resources to address the priority needs, directly through the VHS Program, as well as through broader community actions.

For example, malnutrition may be a key problem due to a real lack of knowledge about the appropriate age to introduce food to an infant. It may also be due to a felt need and a real need to produce more food. The Trainer/Supervisor can act upon this information by starting the VHS training with the module on Nutrition (see Chapter 18) and by discussing with leaders how to reduce crop wastage while promoting increased food production. The Trainer/Supervisor can make a list of activities to follow up on based on the needs assessment.

Role and responsibilities of the community

How the community can support Volunteers

The community is the beneficiary, as well as the support, of the Volunteer Health Sister Program. The precise responsibilities of the community will need to be negotiated. Typically, the community is responsible for:

- Assisting in recruiting and selecting Volunteer Health Sisters
- Referring women to Volunteer Health Sisters and informing people about their services

- Providing the money for supplies if they cannot be sustained by the local health facility
- Providing special incentives for the Volunteers for their services; for example, priority treatment at the local clinic for the VHS and her family, or an intermittent "bonus" for exceptional service, although this may require a collection system to cover the bonus
- Assisting in conducting community surveys, collecting baseline data, and gathering other health information requested by the VHS
- Providing transport to immunization sessions or special services at MCH Clinics or Basic Health Centers for Volunteers and women and children, and providing transport for emergencies
- Promoting community health and preventive education, especially related to maternal and child health, by supporting events that reach all people, including extending the Prime Health Messages through schools and mosques to reach children and male family members
- Identifying a community team of Volunteer Health Sister Program advisors—a community board of people who accept the responsibility to assist in solving problems or encouraging and giving positive support to the Health Sisters

Exhibit 3.2

Sample List of Questions for a Community Needs Assessment

Population

How many people live in the community?

How many babies were born this year? How many people died? Of what causes? At what ages? Could their deaths have been prevented? How?

How many children do most parents have? How many of their children have died? Of what? At what ages? What were some of the underlying causes?

Felt needs

What things in people's daily lives (living conditions, ways of doing things, beliefs, etc.) do they feel help them to be healthy?

What do people feel to be their major health problems, concerns, and needs?

How do the people meet their health needs—with traditional remedies, drugs from the pharmacy, by seeking care from private or public clinics or from traditional healers?

Continued

Continued

Personal hygiene and environmental sanitation

Are houses kept clean? Does the village appear clean? Where do people put garbage? Why?

Are flies, fleas, bedbugs, rats, or other pests a problem? In what way? What do people do to control them? What else could be done?

Is food protected? How could it be better protected?

What animals (dogs, chickens, etc.), if any, are allowed in the house? Are animals kept in a pen or allowed to roam freely where children play?

Where do families get their water—from a well, spring, river, or stream? How clean is the water? Is the water source contaminated by defecation, bathing, or disposal of garbage? What precautions are taken to assure that the water source is kept clean?

How many families have latrines? How many use them properly?

Control of diarrheal diseases

How common is diarrhea? Is it considered dangerous? When is it considered dangerous? In which months is it most common?

What can be done to prevent diarrhea among children in the community?

Do people know about Oral Rehydration Solution? Are ORS packets readily available at the clinic or pharmacy?

Do people know what to do if their child has diarrhea?

Immunization

How many children have been vaccinated? Against what sicknesses?

Is there a fixed facility that provides vaccination services or a mobile immunization team? If there is a mobile team, do community leaders and other members know where and when they can obtain vaccines?

What other preventive health measures are being taken? What others might be taken?

Nutrition

How many mothers breast feed their babies? For how long? When do they begin supplementary foods? Why is this important?

What are the main foods people eat? Where do they come from? Do people use all available food sources?

How many children are underweight or show signs of poor nutrition?

How much do parents and school children know about nutritional needs?

Does the land provide enough food for each family? How long will it continue to produce enough food if families keep growing?

How are crops and food stored? Is there much damage or loss? Why?

Continued

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Common cold and pneumonia

If cooking fires are made inside the house, what happens to the smoke?

What do people do if their child has fast breathing?

Safe motherhood

What role do dais play in health care? How many have been trained?

How many women in the community have died in childbirth during the last year? Why?

What could be done to prevent such deaths in the future?

How many parents are interested in not having any more children or in not having them so often? For what reasons?

Injury prevention and first aid

Is cooking done on the floor, or where? Is the cooking fire out of reach of children?

How common are injuries from land mines? From guns?

What are the most common injuries among children?

Informal and formal health services

What traditional ways of healing and medicines are used? Which are of greatest value? Are any harmful or dangerous?

What role do traditional healers such as bonesetters, hakims, and dokans play in health care, especially for women and children?

What health services are nearby? How satisfied is the community with the various health services? What do they cost? How much are they used?

Self help

What type of common health problems can people care for themselves? How much must they rely on outside help and medication?

Are people interested in finding ways of making self-care safer, more effective, and more complete? Why? How can they learn more? What stands in the way?

What are the rights of rich people? Of poor people? Of men? Of women? Of children? How do each of these groups get medical attention when they need it? What needs to be changed? By whom? How?

Do people work together to meet common needs?

What can be done to make your village a better, healthier place to live? Where might you and the community begin?

EXERCISES

EXERCISE 1

INTRODUCING THE VOLUNTEER HEALTH SISTER PROGRAM TO THE COMMUNITY

INDIVIDUAL OR GROUP EXERCISE

Directions: Individually or in small groups of 3 or 4, prepare an introduction that you can use to introduce the concept of the Volunteer Health Sister Program to community leaders in your area. Include in your introduction:

- the rationale for the program
- an explanation of who can be a Volunteer Health Sister
- the benefits of the program
- the role and responsibilities of the community in supporting the program

Select one individual or group representative to make the introduction in front of the class.

Time: 30 minutes (20 minutes for preparation of introduction, 10 minutes for presentation)

Materials: Paper; pens or pencils

EXERCISE 2

ADDRESSING THE COMMUNITY'S CONCERNS

SMALL AND LARGE GROUP ROLE PLAY

Directions: Divide into groups of 4 to role play the situation. At the conclusion of the small group role play, observers will comment to the other members of their groups about how well the Trainer/Supervisor listened and addressed the leaders' concerns, as well as how clearly the Trainer/Supervisor explained the program. Select 1 group to role play in front of the entire class. The class will critique the same points.

Roles: 1 Trainer/Supervisor, 2 Community Leaders, 1 Observer

Situation: The Trainer/Supervisor introduces the Volunteer Health Sister Program to the leaders, citing the points in Exercise 1 above. The community leaders express

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many concerns they have and question why the Health Sisters are not paid if their services are of value.

Time: 15 minutes

Materials: None

Exercise 3

Mapping

Individual or Group Exercise

Directions: At a nearby demonstration site, prepare a map of the community (or, for a simple classroom activity, prepare one of your own community). Include a key. Show the map to others to see if the map is clear by asking the following questions:

a. Approximately how many households are represented in the map?

b. Where are the health facilities?

c. What type of formal and traditional health practitioners are in the area?

d. When was this map created?

e. Where are the households with families with children under age 5?

f. What is the distance from one side of the community to another?

Time: 2 hours (or 1 hour, 15 minutes for classroom activity only)

Materials: Paper; pens or pencils; sample key (Exhibit 3.1)

EXERCISE 4

CONDUCTING A NEEDS ASSESSMENT

SMALL GROUP EXERCISE

Directions: Divide into groups of 3 to 5. At a demonstration site (or, for a simple classroom activity, assume you will carry out assessment in a community of 1 of the group members):

a. Prepare a list individuals and types of people in your community whom you would interview to conduct a community needs assessment. Explain why you selected each of them.

b. Determine how you would conduct the needs assessment. Prepare a schedule of interviews (individual meetings, small group interviews, or focus group discussions).

c. Prepare a list of questions which you would use to prepare for each type of interview.

d. Prepare an introduction to a focus group: explain the purpose and duration of the discussion, and how the results will be used.

e. Conduct an assessment (or conduct large group role play for classroom activity).

f. Discuss results, problems, and solutions in the large group.

Time: 4 hours (or 1 hour, 30 minutes for classroom activity)

Materials: Sample List of Questions for a Community Needs Assessment (Exhibit 3.2)

EXERCISE 5

IDENTIFYING INDIVIDUALS FOR A NEEDS ASSESSMENT

SMALL GROUP ROLE PLAY

Directions: Divide into groups of 3 to conduct the role play. The observers will give feedback to their small groups about how the Trainer/Supervisor dealt with the situation. In large group, discuss who should be interviewed and how to address local sensitivities.

Roles: 1 Trainer/Supervisor, 1 Bonesetter, 1 Observer

Situation: The Trainer/Supervisor has just completed a discussion with several heads of households about the community's health needs. The local bonesetter is angry

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that he has not been invited to attend the focus group. The bonesetter has heard indirectly about plans for a new program for volunteers. He is already concerned that they will disrupt his practice.

Time: 30 minutes (15 minutes role play, 5 minutes feedback, 10 minutes discussion)

Materials: None

Exercise 6

How to Lead a Focus Group

Large Group Role Play

Directions: Select 4 people to role-play the situation in front of the class. The class will critique.

Roles: 1 Trainer/Supervisor, 3 Mothers

Situation: The Trainer/Supervisor has asked several women at the clinic to discuss their ideas about their health needs. The "mothers" begin to respond. One answers the questions without giving others a chance to speak. The Trainer/Supervisor tries to guide the discussion to the other focus group participants. Another mother then talks about topics unrelated to community health. The Trainer/ Supervisor tries to redirect the discussion.

Time: 25 minutes (15 minutes role play, 10 minutes critique)

Materials: None

CHAPTER 4

Recruiting and Selecting Volunteer Health Sisters

After the Volunteer Health Sister Program is introduced to the community and support is obtained from key leaders, recruitment and selection of Volunteer Health Sisters can begin. It is important to remember that coverage, or reaching all families, is essential to improve health status. For this reason, the service location of a potential candidate (the geographical area to be served by the Health Sister) should be a prime consideration in selection in order to assure that the optimal number of families are reached and to avoid duplication of services. To achieve coverage, you should select women from different households, from the more populated sections, and from different sections of the community.

Coverage is essential to improve health status

Recruitment methods

There are a variety of recruitment methods, and depending on the community, some may be more appropriate and effective than others. Each method has advantages and disadvantages. It is often best to use several methods at once.

How to recruit volunteers

1. **Announcements at community events such as local celebrations, wedding parties, or gatherings after Friday prayer**

   Many people can be reached at one time through this method. When tribal leaders, elders, religious leaders, or commanders make the announcement at an event, they readily gain the confidence of the people.

   If the announcement is not complete or if it includes inaccurate details, a negative attitude toward the program can quickly spread. Therefore, it is important to ensure that the information is clear and accurate by using the key facts about the program when making the announcement (see Chapter 1, "Rationale for the Volunteer Health Sister Program").

2. **Recruiting relatives and friends**

   It is relatively easy for Trainer/Supervisors to recruit relatives and friends; for this reason, this method is particularly useful during the start-up phase of a Volunteer Health Sister Program. You must involve other community members soon thereafter, so the program is perceived as one which is to benefit everyone, not only a few families known to the Trainer/Supervisor or village leaders.

3. **Recommendations from health facility providers**

   Recruitment based on recommendations of health facility staff is likely to yield candidates who best meet the Volunteer Health Sister criteria, especially if the staff can select among women who attend clinic health education sessions and who have already shown an interest in learning and sharing health messages.

   One must remember that families who most need health care may be too frightened, too busy, or too far away to come to the health facility. Keeping this in mind and using the map, the Trainer/Supervisor should be sure to eventually expand future recruitment to areas farther from the clinic or to other underserved populations.

4. **Recommendations from local authorities, natural leaders, or respected community members**

   This method encourages participation because leaders and respected personalities inspire others. The potential disadvantage is that the authorities may expect their recommendations to be carried out, so it is important to be clear about the criteria.

5. **Self-referral**

   Self-referral is an effective recruitment method because motivated candidates have a demonstrated interest in becoming a Volunteer. Some women who do not suit the criteria may be interested, but the Trainer/Supervisor can make a decision about their participation during the final selection process (see "Selection Methods" below).

6. **Families at risk**

   Recruiting women from families that have already had a serious illness or death is effective because these women are often highly motivated to gain knowledge about diseases to prevent such an incident from recurring.

7. **Dais**

   The dai already maintains a role in the community as a traditional health practitioner; she frequently is already sought out by women for delivery care. Dais who complete Volunteer Health Sister training can continue their training as Female Health Workers to enhance and expand their

skills in prenatal, delivery, and postnatal care. (See Chapter 2, "The Relation of the Volunteer Health Sister to the Primary Health Care System".)

The Trainer/Supervisor is responsible for recruitment activities, but community leaders, teachers, and other health personnel can also assist.

Selection methods

How to select volunteers

There are three alternatives for selecting Volunteer Health Sisters. Selection can be:

1. **Open to all interested candidates.** Nobody is refused training. This option allows for natural attrition. Eventually a core group of truly motivated Volunteers will emerge.
2. **Based on established criteria.** Training is open to all interested women who meet the criteria; then allow for natural attrition.
3. **Based on established criteria followed by a trial period.** After a trial period, the most effective women are finally selected. This alternative requires an objective process whereby a selection committee evaluates the candidates.

The first method does not discourage anyone who wants to learn health messages, simple services, and referral information, but the second and third alternatives save resources because kits will be distributed only to the most effective outreach workers. The use of criteria minimizes the possibility of drop-outs, inactive individuals, or Volunteers who are unlikely to serve many families.

It is useful to discuss the recruitment and selection methods with members and leaders of the community in order to involve the community in the program. You can let them decide which recruitment and selection methods will be used and they can communicate this information to others. Male and female members of the community can be actively involved in recruitment. For instance, announcements about the program can be made at the mosque during Friday prayer. Men can inform the women in their household and encourage their participation. Women who have heard about the program while seeking care at the clinic can inform their relatives and friends.

Considerations for selection criteria

Using criteria for VHS selection

If method #2 or #3 is preferable, the following considerations are useful in establishing criteria:

1. Minimum age (most VHSs are over 15 years old, but younger individuals may also be capable)
2. Family permission
3. Length of residence in the community
4. Interest, motivation, and ability to learn and disseminate health information
5. Location in terms of geographic and population accessibility
6. Physical health
7. Sincerity, politeness, and respect for others
8. Mobility or willingness to visit women outside her own household
9. Sufficient time and willingness to attend training sessions
10. Marital status (Single and married women can be Volunteers, but criteria may need to be set if community restrictions apply)

There may occasionally be a need to select a candidate who does not meet all of the criteria. For example, there may be a candidate who recently moved to the area but who demonstrates an exceptionally keen interest and ability to encourage others. If the selection of these candidates as trainees will benefit the program, it is acceptable to make a special exception as long as it does not set a precedent for disregarding criteria.

As the program develops over the years, the qualities of the successful Volunteer Health Sisters will become evident. It is important to keep a record of the characteristics of Volunteer Health Sisters in order to determine which attributes (such as marital status, age, mobility, or length of residence in the area) are shared by the best Volunteers. This information can assist program managers and Trainer/Supervisors to identify and focus recruitment on potential candidates who fit this "model".

Exercises

Exercise 1

Recruitment

Case Study

Directions: In a large group, read the following case. Discuss the case study questions.

After attending a workshop in the provincial capital on how to implement a Volunteer Health Sister Program, Ahmed (a VHS Trainer/Supervisor) returned to his village in Logar. He kept thinking about the program all along the way. He could not wait to reach his village where he could start recruiting candidates to start the implementation in his area. Soon after reaching home, he was informed that several families had migrated to the catchment area near his clinic. He was told that there were many school girls among them. He said to himself, "I can easily recruit school girls and they are easy to teach. Why shouldn't I recruit them as prospective Volunteers? After visiting the new families in the area, he managed to recruit 10 school girls. "What a great job!" he thought to himself. "I am really proud of myself today!"

Ahmed was conducting daily sessions of the Volunteer Health Sister curriculum. He distributed 10 kits containing ORS and soap as well as teaching aids like flip charts and posters to the new Volunteers. Since all of the new recruits were literate, several of the Volunteers asked if he would lend them his "Volunteer Health Sister Manual," which he had received during the workshop, so that the Volunteers could take turns reviewing it. He did so, although reluctantly, because it was the only teaching guide he had.

Ahmed went to Kabul to see some of his relatives. After one week, he returned to his village to continue his training of Volunteer Health Sisters. He was shocked as he learned that all of the Health Sisters had returned to their homes in Kabul. Ahmed was at a loss. He said to himself with disappointment, "I lost my Volunteers, my supplies, teaching aids, and even my trainer's Manual."

1. What are the main problems Ahmed confronted?
2. Which recruitment method did Ahmed use?
3. What criteria did he use?
4. What could he have done to avoid such problems?

Time: 30 minutes

Materials: Case study

Exercise 2

Selection

Case Study

Directions: In large group, read the following case. Discuss the case study questions.

Your clinic has been conducting health education sessions for patients for the past year. On Saturday and Monday the sessions are for women; on Sunday and Tuesday the sessions are for men.

You have decided to recruit Volunteer Health Sisters from the existing women's health education group; by announcing the program at the men's health education sessions so that they can inform their relatives; and by obtaining recommendations from local authorities.

1. How will you decide which selection method to use?
2. Which selection method do you think is preferable for your community? Why?
3. When will you decide which selection method to use? When will you announce how candidates will be selected?
4. Based on the reaction of the recruitment announcements, at least 15 women are already interested in becoming Volunteer Health Sisters. What will you do, since you need to limit Volunteer Health Sister discussion groups to approximately six "trainees" in order to have effective sessions?

Time: 20 minutes

Materials: Case study

Exercise 3

Recruitment and Selection

Small Group and Large Group Role Play

Directions: Divide into small groups of 3 people to role play the situation. Then, select 1 group to role play in front of the entire class. Discuss the advantages and disadvantages of alternative methods.

Roles: 1 Trainer/Supervisor, 1 Basic Health Worker, 1 School Teacher

Situation: The Trainer/Supervisor has discussed the idea of starting a Volunteer Health Sister Program with several influential community members, one of whom is

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the teacher. They have agreed to the program. The Trainer/Supervisor has already trained 3 of his relatives as Volunteers; now he is ready to involve other village women. During the role play, the Trainer/Supervisor discusses alternative methods for recruitment and selection with the BHW and the teacher, using a map of the area to explain the need to select candidates considering coverage. The BHW and school teacher give their recommendations, which will be agreed upon with the community leaders.

Time: 45 minutes (15 minute small groups, 15 minute large group, 15 minutes discussion)

Materials: Map of a potential VHS Program catchment area

CHAPTER 5

Volunteer Health Sisters' Responsibilities

The Volunteer Health Sister has three major responsibilities:

Treatment and prevention must be balanced

1. Preventive health education, including early treatment and home care for common health problems
2. Health product distribution
3. Referring and/or accompanying a patient to a formal health care service

Preventive health education is the foundation of the Volunteer's job, but treatment and prevention must be balanced to address both immediate and long-term health needs. Helping villagers realize that they themselves can take preventive actions is important, but it may not be possible if the Volunteer cannot simultaneously respond to the immediate health needs of a sick individual, thereby earning their respect and cooperation. In order for a Volunteer to effectively respond to a mother with a dehydrated child, for example, the Volunteer must be able to teach and carry out Oral Rehydration Therapy, help the mother obtain Oral Rehydration Salts, and, if complications develop, refer the child to a more highly trained medical practitioner.

Early treatment may be a form of preventive medicine because early treatment often prevents a mild illness from becoming more serious or life-threatening. A mother will be more likely to learn about and practice preventive behaviors when the Volunteer Health Sister has successfully shown her how to provide early treatment. Thus, the tasks of the Volunteer Health Sister simultaneously encompass preventive health education, home treatment, distribution of health products, and referral.

Preventive health education and home treatment

Traditional practices may be useful, harmless, or dangerous

The Volunteer Health Sister is responsible for teaching women prime health messages about:

1. Personal Hygiene and Environmental Sanitation
2. Control of Diarrheal Diseases
3. Immunization
4. Nutrition
5. Common Cold and Pneumonia
6. Safe Motherhood
7. Injury Prevention and First Aid

Additional messages about Malaria, Leprosy, Tuberculosis, Mental Health, Dental Care, and Community Health and Surveillance can be added during refresher courses as appropriate.

There are many traditional practices for treating common illnesses at home in Afghanistan, such as treating a child with a cough by using a mixture of herbs or pulling on the child's throat. While many practices are useful or harmless, some are dangerous, like withholding food or fluids from a dehydrated child or applying cow dung or kohl to a newborn's umbilical cord after it is cut. The Volunteer Health Sister can discourage traditional practices that are dangerous. Her preventive health tasks include showing women how to recognize common health problems early, determining which cases can be treated at home and which require treatment by a formal health provider, and providing home care.

Health product distribution

Target families for health product distribution

In a well-managed program, the Volunteer Health Sister regularly receives supplies of several products to distribute to beneficiaries. Initially, these products will be limited to soap and Oral Rehydration Salts (ORS). Other items, such as vitamin A capsules, iron tablets (ferrous sulfate), and delivery kits, can be added to the list depending on the skill level of the Volunteer and local disease requirements and financial resources.

The task of the Volunteer is not to distribute these supplies indiscriminately, but to target families that will most benefit from the products either directly for medical reasons or as an incentive to expand awareness of the Volunteer Health Sister's package of services. The Trainer/Supervisor can help the Volunteer select target families for health product distribution.

Referral

When and where to refer patients

Volunteer Health Sisters, like other health workers, must know their own limits. For example, if a family brings a child with signs of tetanus to the Volunteer, she must know that the child needs to be treated by a more qualified medical practitioner. She should not respond to demands to administer medications, but confidently refer the patient to the nearest appropriate provider with an explanation that medicines can be harmful if they are incorrectly prescribed.

Families should be made aware that the Health Sister can always help them, but that help may be in the form of a referral or assistance in follow-up care. For example, the Health Sister can facilitate entry into the formal health care system by accompanying the patient to a provider. The community needs to understand the level of skills the Volunteer has to offer.

It is the Volunteer's responsibility to know which cases she should refer and where the designated referral points are. Referral points are health facilities that can appropriately respond to, or health providers who can appropriately manage, an individual's specific health needs. A referral point could be a vaccination team visiting the district, a Basic Health Worker who lives in the community, a clinic in a nearby town, or a hospital in the provincial capital.

The Trainer/Supervisor should emphasize to the Volunteer Health Sister that if she has any question about the illness, signs, or symptoms, she should refer the patient.

No referral is wasted.

Referral points vary between communities and according to the reason for the referral. Types of facilities available vary considerably in different parts of the country. For example, if there is a Basic Health Worker (BHW) in the area and no clinic within 30 kilometers, the Volunteer Health Sister can refer a child who has a cough with fast breathing to the BHW. A Volunteer Health Sister can refer a pregnant women to a Female Health Worker (trained dai) for a delivery. The Health Sister should know where the closest maternal and child health clinic and basic health centers are in order to refer a pregnant woman who is exhibiting danger signs, like bleeding, during pregnancy. Chapter 2, "The Relation of the Volunteer Health Sister to the Primary Health Care System," offers an explanation of the services available at various levels of the referral system.

Know the designated referral points.

The Trainer/Supervisor must carefully review designated referral points with the Volunteer Health Sisters during training sessions on each type of illness. The Trainer/Supervisor should also check for the appropriateness of referrals when reviewing the monthly monitoring form with the Health Sister (see Chapter 10, "Monitoring and Evaluation"). As they review the form together, focusing on the columns symbolizing "referrals", the Trainer/Supervisor can ask the Volunteer why she referred each case and then comment on the appropriateness.

The job description of the Volunteer Health Sister

The job description of the Volunteer Health Sister (see Exhibit 5.1) summarizes her responsibilities, skills, and qualifications.

Exhibit 5.1

Volunteer Health Sister Job Description

Responsibilities

1. To address key health care issues:

   To promote personal hygiene and environmental sanitation

   To promote prevention of diarrhea, to refer dangerous cases appropriately, and to teach caretakers how to provide early treatment and home care with Oral Rehydration Therapy

   To promote prevention of common cold and pneumonia, to refer suspected pneumonia cases, and to teach caretakers about basic home care for common cold and pneumonia

   To promote good nutrition for women and children and to refer malnourished patients, as appropriate

   To promote immunization for women and for children under age 2 and to refer these target groups for immunization

   To promote Safe Motherhood and refer cases of pregnancy for prenatal care (including vaccination) or danger signs, as appropriate

   To promote injury prevention, to provide first aid, and to refer cases of injury which require more sophisticated care

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2. To accurately maintain an up-to-date monitoring form for keeping track of encounters with clients and to submit it to the Trainer/Supervisor on a regular basis

(To be added later, as appropriate:)

3. To promote prevention of malaria and refer cases for treatment
4. To promote prevention of TB and refer cases for treatment
5. To promote care for the disabled
6. To promote dental care

Skills and Qualifications Required

1. Ability to effectively teach other women about health
2. Motivation to share health knowledge and skills with other community members
3. Competency to accurately explain and demonstrate the prime health messages of the Volunteer Health Sister curriculum

Exhibit 5.2 summarizes the preventive health messages, product distribution, and referral tasks required for each module of the Volunteer Health Sister curriculum.

Exhibit 5.2

Summary of Volunteer Health Sister Responsibilities

Module	Promote Health Education & Home Treatment	Distribute Products	Provide Referrals
Personal Hygiene and Environmental Sanitation	- Personal hygiene - Environmental sanitation	Soap	
Control of Diarrheal Disease	- Personal hygiene - Environmental sanitation - ORS preparation - Breast feeding - Feeding an ill child - Danger signs	ORS	To BHW, BHC, CHC, MCH Clinic or Hospital for dehydrated children
Immunization	- 6 preventable childhood diseases - T.T. (tetanus toxoid) vaccine for women	(Paracetamol)	To mobile team or fixed facility, depending on local EPI situation
Nutrition	- Breast feeding - Weaning time and foods - Feeding an ill child - Nutrition for pregnant and lactating women (- Assess status using arm circumference bands)	(Iron tablets) (Vitamin A)	To BHC, CHC, MCH Clinic, or hospital for growth monitoring and treatment of malnourished children
Common Cold and Pneumonia	- Distinction between cold and pneumonia - Danger signs of pneumonia - Home care	(Paracetamol)	To BHW, BHC, CHC, MCH, Clinic or Hospital for children with respiratory distress
Safe Motherhood	- Prenatal Care - Nutrition during pregnancy - T.T. vaccine - Danger signs - Cord Care	(Iron tablets) (Birth Kits)	To MCH Clinic for prenatal care, danger signs, T.T., and contraceptives; to FHW for normal delivery; or to mobile EPI team for T.T.; to hospital for complications
Injury Prevention and First Aid	- Injury Prevention - Management of burns, bleeding, skin wounds, broken bones, poisoning		To BHW, BHC, CHC, MCH Clinic or Hospital depending on injury

( ) - May be added if training is expanded and resources permit

CHAPTER 6

The Training System

Improving the health knowledge, skills, and practices of community women depends upon a Volunteer Health Sister program training system, which has four levels:

The 4 levels of the training system

1. **Master Trainer**
2. **Training Trainer/Supervisors**
3. **Training Volunteer Health Sisters**
4. **Training Community Women**

The impact of the program is directly dependent on the Master Trainer's effectiveness, followed by the Trainer/Supervisor's ability and motivation to effectively train the Volunteer Health Sisters, followed in turn by the Volunteers' ability and motivation to share this health information with other women. If training is ineffective at any level, the result will be a less-than-optimum impact at the community level.

Monitor training results

The VHS Program may be managed by an MCH or VHS program manager. The Program Manager should continuously monitor the results of training, at all levels, to see where weaknesses are so that improvements can be made early on. For example, Master Trainers should administer a written pretest/post-test at the beginning of a workshop and then at the conclusion of the workshop to measure the improvements in knowledge occurring during training of trainer (T.O.T). workshops. Master Trainers can use session evaluation forms to obtain feedback from participants on each T.O.T. session. Sample pretest/post-test and session evaluations are presented as Exhibits 6.1 and 6.2. The Assessment Questionnaires presented in Appendix A and the supervisory review forms (see Chapter 7, "The Supervisory System") can be used to monitor the

knowledge, skills, and practices of the Trainer/Supervisors and Volunteer Health Sisters, respectively. Surveys can be useful tools for monitoring the change in health knowledge, skills, and especially the practices of women at the community level, as well as Volunteers and Trainer/Supervisors in the field (see Chapter 10, "Monitoring and Evaluation").

Exhibit 6.1

Sample Pretest/Post-test
VHS Management Systems Development Workshop

1. List 5 prime health messages for Nutrition. (5 points)

2. List 5 prime messages for Vaccination. (5 points)

3. An objective must answer what 4 questions? (4 points)

4. What are the 3 functions of the Management Cycle? (3 points)

5. Why is a quality assurance system important for the Volunteer Health Sister Program? (5 points)

6. Why is regular supervision of Volunteer Health Sisters important? (5 points)

7. If a Volunteer Health Sister is called upon for a child who has a cough and who is breathing much more rapidly than normal, then to whom should she refer the child—to a trained dai (Female Health Worker), BHW, clinic, or hospital? Why? (5 points)

8. List 3 reasons for the VHS to use a monitoring tool. (3 points)

9. List at least 4 ways we can evaluate the Volunteer Health Sister Program using existing knowledge or records. (4 points)

10. List 4 warning signs in pregnancy that require immediate help. (4 points)

11. What should a VHS do for a child who has a simple burn? What should a VHS do if she faces a person with a moderate or severe burn? (4 points)

12. Why is it important to have a work plan? (3 points)

Exhibit 6.2

Sample Session Evaluation

Session ______________________ Date ____________

1. The areas covered in this session are relevant to my work situation.

1	2	3	4	5
strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree

2. The information in this session is useful to me personally.

1	2	3	4	5
strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree

3. The content was clear and understandable.

1	2	3	4	5
strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree

4. The instructor was well organized and prepared.

1	2	3	4	5
strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree

5. The instructor kept the presentation moving and interesting.

1	2	3	4	5
strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree

6. I would recommend this workshop to others.

1	2	3	4	5
strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree

7. What I liked most was . . .

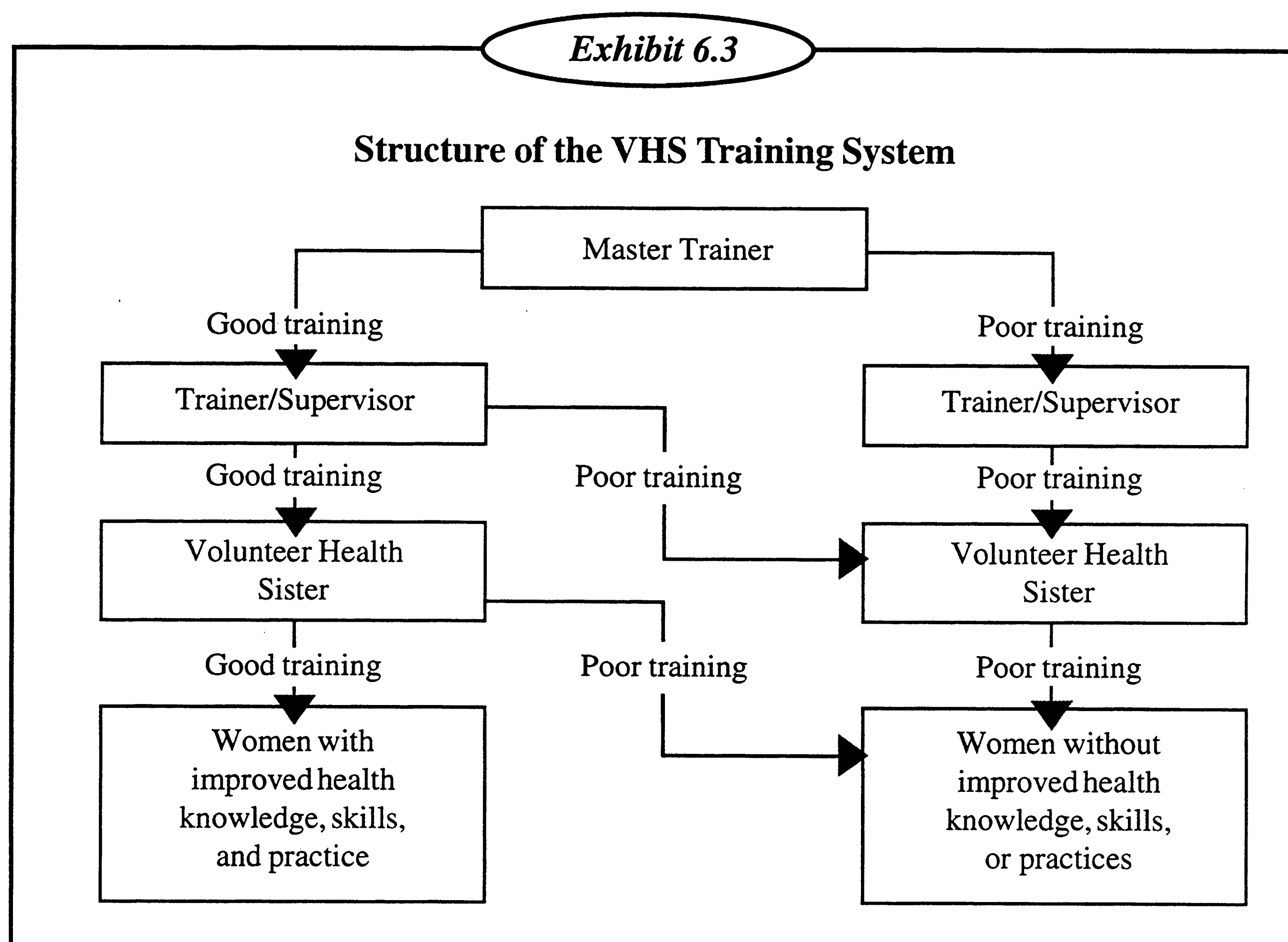
8. What I liked least was . . .

9. In addition, I would like to say . . .

Structure of the training system

A cascade of training

Exhibit 6.3 shows how the Volunteer Health Sister Program has been designed as a cascade of training sessions. The program begins at the national, regional, or organizational level, where experienced Master Trainers conduct a series of workshops for Trainer/Supervisors who have been selected from the health facilities.



Purpose and content of training of trainers (T.O.T.) workshops

T.O.T. workshops alternate theory with practice

The criteria for selecting potential "Trainer/Supervisors" to attend the T.O.T. workshops depend on where the sponsoring organization (government, regional health administration, or non-governmental body) intends to implement the program. Criteria for the pilot Volunteer Health Sister Program included staff selected from the health facilities that actively demonstrated a successful commitment to outreach activity and health care for women and children.

The Volunteer Health Sister Program can be implemented through a Basic Health Center, a Maternal and Child Health Clinic, or other health facility. As mentioned earlier, the Trainer/Supervisor of the Volunteer Health Sisters is the staff person at the health facility who will be responsible for teaching and initially for supervising the Volunteers; hence the term "Trainer/Supervisor". The Trainer/Supervisor is also responsible for introducing the program to the community, organizing the recruitment and selection process, maintaining Volunteers' supplies, and monitoring the program at the local level. The T.O.T. workshops have therefore been designed to develop the capabilities of the Trainer/Supervisor to carry out all these tasks.

The purpose of the workshops is to teach the Trainer/Supervisors how to develop the VHS Program, to use different teaching methods and the curriculum, and to develop communication skills. The series of workshops is designed to alternate theory with practice during each workshop. Between workshops the Trainer/Supervisors implement the program in their villages. T.O.T. workshops are best conducted at training centers that have an affiliation with a local community site to allow a combination of classroom learning with practical fieldwork.

The four workshops are:

Workshop 1: Introduction to the Volunteer Health Sister Program

The purpose of this two-week workshop is to introduce participants to the primary health care concept, to demonstrate why women and children are the priority groups for health interventions, to define what and how health information and services should be extended into the home through the Volunteer Health Sister Program, and to equip the participants to begin recruiting and training of Volunteers.

Specifically, the first workshop addresses:

- the definition and value of primary health care
- the magnitude of women's and children's health problems
- key child survival and safe motherhood strategies
- the rationale for the Volunteer Health Sister Program
- introducing the program to the community
- recruiting and selecting Volunteer Health Sisters
- teaching the first two modules of the curriculum (Personel Hygiene and Environmental Sanitation and Control of Diarrheal Diseases)

Workshop 2: Implementation of the Volunteer Health Sister Program

The purpose of the second workshop, also two weeks long, is to build upon the participants' experiences in introducing the program to their community; to develop solutions to problems encountered during the introductory phase; and to introduce the management systems that must accompany training to create a sustainable program. During this workshop, participants review the first two modules and begin teaching the curriculum modules on Nutrition and Immunization to further develop their teaching abilities.

The specific content encompasses:

- problems encountered and solutions developed during the initial steps of implementation
- introduction to the supervisory system and associated supervisory checklists
- introduction to the referral system
- introduction to the quality assurance system
- introduction to the monitoring and evaluation system and using a tool for monitoring service outputs
- developing a training plan and training techniques, with a focus on the first four modules

Workshop 3: Management Systems Development

This two-week workshop continues the development of the program by emphasizing management systems development and by introducing the remaining three modules of the core curriculum (Common Cold and Pneumonia, Safe Motherhood, and Injury Prevention and First Aid). It includes:

- applying management principles to the Volunteer Health Sister Program
- setting program objectives
- developing practical solutions to problems faced in the implementation of the supervisory system
- improving the effectiveness of the referral system
- developing practical solutions to problems faced in implementation of the monitoring system
- developing an evaluation system, including types of data and methods of collection
- developing a workplan

- continual development of training techniques, with a focus on the final three modules of the curriculum.

Workshop 4: Improving Program Impact

The fourth T.O.T. Workshop lasts one week. It should be tailored to the specific issues that arise in each program, as identified through field assessments. Topics that are important at this stage are:

- refining training techniques
- focusing on modules, or particular content areas, that need to be re-emphasized
- introducing additional curriculum topics such as malaria
- using evaluation feedback to continually improve the quality of the program
- expanding coverage
- ensuring local sustainability of the program

Phasing of Training of Trainers Workshops

A phased design is more effective

By phasing the workshops in four stages, the training system allows the program manager and Trainer/Supervisors to analyze problems and to develop solutions at each stage of implementation. The phased design is more effective because the progress of the participants can be monitored closely. Each workshop should start with a status report from each participant regarding the various programs. Information from earlier sessions should be reviewed before new material is introduced. This teaching method reinforces the method that the Trainer/Supervisors are to use with the Volunteer Health Sisters, and it is an effective way to review material with people who cannot read.

Two to 3 months should elapse between the first and second workshops. The third and fourth workshops should follow within 4 to 6 months, taking into consideration factors such as Ramazan and weather conditions. Exhibit 6.4 is a sample timetable. Field assessments can be carried out between workshops to provide ongoing support to Trainer/Supervisors and to collect information that will be important in preparing the next workshop.

Exhibit 6.4

Sample Timetable for Training of Trainers Workshop

Workshop Title	Duration in Weeks	Interval before Next Workshop	Date
Workshop 1: Introduction of Volunteer Health Sister	2	2-3 months	April 1996
Workshop 2: Implementation of the Volunteer Health Sister Program	2	4-6 months	July 1996
Workshop 3: Management Systems Development	2	4-6 months	Dec. 1996
Workshop 4: Improving Program Impact	1	—	May 1997

Trainer networks

Provide continuing support to Trainer/ Supervisors

After completion of the four workshops, it is important to provide continuing support and periodic refresher training for the Trainer/Supervisors. For example, the Master Trainer could arrange annual meetings of Trainer/Supervisors to share information, compare notes, and discuss variations among the programs. The program manager can develop a newsletter to provide the Trainer/Supervisors with information on recent program accomplishments.

Organizing initial training of Volunteer Health Sisters

The duration of training depends on how quickly trainees master the material

Training of the Volunteer Health Sisters can be divided into two discrete parts: initial training and ongoing refresher training. Initial training on the 7 core modules will take up to 6 months, assuming that sessions are held about twice per week for 2 hours per session.

Developing a session training plan

The Trainer/Supervisor should prepare a session plan, as shown in Exhibit 6.5, before teaching each module. The session plan is a tool that helps the Trainer/ Supervisor to think through the order, content, duration, teaching methods, and materials of the session. It specifically lays out the day, module topic, subtopics, time to conduct each part of the session, the teaching method, and materials.

Exhibit 6.5

Session Plan

Date	Module	Subtopics	Time	Method	Materials
5/6/96	Common Cold & Pneumonia	1. Review last session	10 min	Question/ Answer	Flip chart
		2. Teaching objectives for common cold and pneumonia	5 min	Lecture	
		3. Prevention	15 min	Story telling	
		4. Define pneumonia	10 min	Discussion	Poster
		5. Define common cold	10 min	Question/ Answer	Poster
		6. Why pneumonia is dangerous	10 min	Story	
		7. Danger signs of pneumonia	10 min	Role Play	
		8. Pneumonia needs medicine	5 min	Discussion	Medicine bottles
		9. When to refer	10 min	Role Play	
		10. Signs of common cold	5 min	Question/ Answer	
		11. Treatment of common cold	10 min	Demonstration	
		12. Evaluation	10 min	Question/ Answer	Notebook

In addition to the topics in the modules, certain sessions should be devoted to problems the Volunteer Health Sisters face in their job, how to use the monitoring tool (to be introduced after the first 4 modules have been taught), and reviews of the training content or techniques. The frequency and scheduling of sessions should be set after consultation with the Volunteer Health Sister candidates. The precise number of sessions required to complete each module also depends on how quickly the trainees master the material.

Evaluate trainees after each session to see if they have satisfactorily mastered the knowledge and skills set forth in the training objectives by asking each trainee to explain one of the key parts.

Each session should last one to two hours and include a review of the previous session as well as new information. Exhibit 6.6 indicates how many sessions, on average, each module requires to cover all the material during initial training.

Exhibit 6.6

Approximate Number of Sessions Required to Teach Each Module

Module	Average Number of Sessions
1. Personal Hygiene & Environmental Sanitation	3
2. Control of Diarrheal Diseases	5
3. Immunization	3
4. Nutrition	3
5. Common Cold and Pneumonia	4
6. Safe Motherhood	5
7. Injury Prevention & First Aid	5

At the beginning of each session, the trainer should review the main points of the previous lesson. Ask questions related to the prime health messages taught that day: for example, "What can you do to prevent injuries?" or "Please show me how you would provide first aid for a bleeding leg."

Evaluate trainees after each session.

After each session, the Volunteer Health Sister should begin to practice in her community. After all seven core modules have been covered, the Volunteer Health Sister should continue to conduct work in the community with regular, direct supervision from the Trainer/Supervisor, or under the guidance of another designated supervisor.

If any trainees do not attend a session, the Trainer/Supervisor should arrange a time to cover material that was missed. Alternatively, the Trainer/Supervisor can ask another trainee to teach the session to those who missed it, and the Trainer/Supervisor can test them during a review period in a later session. A sample timetable for arranging the first month's initial training sessions and intermittent supervisory visits is shown in Exhibit 6.7.

Exhibit 6.7

Sample Timetable for Volunteer Health Sister Initial Training

Month of May	Sat	Sun	Mon	Tues	Wed	Thurs
Week 1		Nutrition	Supervisory Visit		Nutrition	
Week 2		Nutrition			Nutrition	
Week 3		Nutrition	Supervisory Visit		Safe Motherhood	
Week 4		Safe Motherhood			Safe Motherhood	

For the sessions to be relevant to the community, the sequence of modules to be taught initially is best determined by immediate needs. For example, modules for seasonal illnesses like diarrheal diseases might be addressed in the summer months or common cold and pneumonia during the winter.

Use needs assessments to determine the sequence of the modules

Although a Trainer/Supervisor may teach a Volunteer Health Sister one-on-one, it is far more efficient for the Trainer/Supervisor to teach small groups of 4 to 6 Volunteers and for Volunteers to conduct group sessions with community women.

Selecting a training site

The training site can be:

Where to train volunteers

- the home of one of the Volunteer Health Sisters
- the guest house of a community leader
- the health facility

Consider the following when selecting a site:

- accessibility for the Volunteer Health Sister trainees and the Trainer/Supervisor
- time of day for training
- space
- limited chance of interruptions (such as noise, visitors, and other meetings)
- the burden on the hosts for providing hospitality

Organizing refresher training for Volunteer Health Sisters

Why conduct refresher training?

After initial training is completed, the Trainer/Supervisor should arrange a refresher training course at least once every six months. Refresher training has four purposes:

1. **To cover lessons** which the Volunteer Health Sister may have forgotten. The Trainer/Supervisor can judge which prime health messages or demonstrations need further emphasis by reviewing supervisory review forms.
2. **To introduce new information or topics** from additional modules.
3. **To share problems** encountered by the Health Sisters, to discuss solutions, and to communicate their successes.
4. **To give feedback to the Volunteer Health Sisters** about information from the monitoring reports so that they can see why it is important to complete the reports.

Training community women

The critical step is sharing information with the community women

The final and most critical step in the training process is the sharing of the prime message information by the Volunteer Health Sister with community women.

There are two types of interactions for training community women: passive and active. A passive interaction means that the Volunteer Health Sister waits for people to come to her for the service. An active style is when the Health Sister actively goes to others' households to share the prime messages, or when she calls together a group of women to talk about health care. The active style usually has a greater impact. Some Health Sisters may feel more comfortable adopting the passive style initially until their confidence is built, or until the program is well established and it is acceptable to adopt a more active approach. Passive outreach requires the community to know who the Health Sisters are and where they can be found.

Volunteer Health Sisters should teach each set of prime messages just as they have been taught, using their teaching aids. Obviously, if a client comes to the Volunteer Health Sister for help, the Volunteer should focus on the problem at hand. She can encourage the person to learn more about other topics at a later, convenient time. Teaching can be one-on-one or in small groups.

Exercises

Exercise 1

Introduction of the Training Program to Volunteer Health Sisters

Large Group Role Play

Directions: Select 4 people to enact the role play in front of the class. The class should critique. Discuss how best to organize initial training and how to select an appropriate time and place.

Roles: 1 Trainer/Supervisor, 3 Volunteer Health Sister trainees

Situation: The Trainer/Supervisor has selected 3 women to begin training as Volunteer Health Sisters. The Trainer/Supervisor discusses with the Volunteer Health Sister candidates when, where, and how training sessions will take place.

Time: 30 minutes

Materials: None

Exercise 2

Scheduling of Initial Training for Volunteer Health Sisters

Small Group Exercise

Directions: Divide into groups of 3. Based on the outcome of the role play in Exercise 1, each group should prepare a timetable for the first and second months of training, taking into consideration an upcoming holiday. The timetable should include the specific modules to be taught during this period. One group will present in front of the entire class.

Time: 30 minutes

Materials: Flip chart paper, markers

EXERCISE 3

DEVELOPING A SESSION PLAN

INDIVIDUAL OR PAIRED EXERCISE

Directions: Each person will select a module from the Volunteer Health Sister curriculum (see Chapter 14). Each person will develop a session plan for teaching one module. Select 3 people to share their plan with the entire class.

Time: 1 hour

Materials: Flip chart paper, markers, VHS curriculum

EXERCISE 4

ASSESSMENT OF KNOWLEDGE, SKILLS, AND PRACTICES

SMALL GROUP EXERCISE

Directions: Divide into groups of 3. Each group will prepare a list of questions that can be used during the first Volunteer Health Sister training meeting to assess the trainees' knowledge, skills, and traditional practices.

Review the list of questions and list some popular traditional practices. Categorize them as beneficial, harmless, and harmful.

1 group will present in front of the entire class. Share other thoughts on traditional practices and focus on those which are beneficial and those which are harmful.

Time: 40 minutes

Materials: Flip chart paper, markers

EXERCISE 5

PROBLEM SOLVING

CASE STUDY

Directions: Read the following story to the group; ask questions at intervals indicated.

Dr. Abdul Aziz is completing a supervisory/assessment visit to one of the Volunteer Health Sister sites in Wardak Province. He is reviewing his notes and wondering why there is such variation in the results of his interviews. He met with 6 Volunteers and with 10 mothers from different households. The

Continued

Continued

mothers were selected from households visited by the same Volunteers whom Dr. Abdul Aziz had interviewed.

The results showed that three of the Volunteers had very good health knowledge, skills, and practices, which they had learned during training, but three other Volunteers had a very poor mastery of the material. The results also showed that in 5 out of the 10 households, the mother could correctly prepare ORS, and 4 out of these 5 knew the danger signs for taking a child to a qualified medical practitioner.

1. What is the problem at this site?
2. Identify several possible causes for the variation between the competency levels of the Volunteers.
3. Identify several possible causes for the variation between the competency levels of the primary caretakers.

Dr. Abdul Aziz decides to discuss the results with Dr. Youssef to identify the root causes of the problem. He asks to see the training schedule, list of attendance for each session, monthly monitoring reports, and supervisory checklists. Dr. Youssef first shows him the training schedule, but he does not keep a regular attendance list. Dr. Youssef explains, "These trainees are 'Volunteers'; I cannot force them to come to every session, especially if they have duties in the household to which they must attend. Bibi Jan often misses our discussion groups, which is probably the reason for her low scores. Halima usually attends, but she is quiet during most of the discussions. I am often not sure if she has understood the material. Shireen, the commander's wife, also misses quite a few sessions. She has seven children and she is often busy during the morning."

4. What other questions should Dr. Abdul Aziz ask in order to identify training problems more clearly?
5. Suggest some practical solutions for solving the training problems. List the solutions. Then, review each solution for how effectively and efficiently it will solve the problem. Prioritize the solutions and decide which solutions you would recommend to implement.
6. Why do you think that only 5 out of 10 mothers know how to prepare ORS?
7. Only 50% of the mothers visited by Health Sisters in this sample have benefited from the program. Is this a problem or a symptom of an underlying problem? Why?
8. What would you do to improve the impact of this program?

Time: 1 hour

Materials: Flip chart paper, markers

CHAPTER 7

The Supervision System

Experience from community programs shows that an effective supervision system is essential for success. Supervision should not only be a means of assuring that staff are performing their duties effectively and efficiently; it should also reveal and solve problems while motivating staff. Supervision should not be punitive, but should focus on helping all Volunteers master skills and perform at their best. Supervisors also have essential roles as morale builders.

Supervision is critical for success

Supervision system requirements

The supervisory system requires:

Understanding supervision

1. **A well-defined supervisory structure and sufficient supervisory personnel.** In a fully functioning system, the Volunteer reports to the Trainer/Supervisor; the Trainer/Supervisor reports to the MCH Regional Health Officer (via the clinic-in-charge); and the MCH Regional Health Officer reports through the Regional Health Administration to the Ministry of Public Health MCH Department.

   Calculate supervisory ratios (i.e., the ratio of the number of Volunteers to the number of supervisors required to effectively supervise them) to assess the adequacy of supervisory personnel (see Chapter 12, "Planning Human Resources").

2. **Adequate incentives for regular supervision.** Provision of travel and other incentives (opportunities for promotion, daily allowances) are often essential to assure regular visits. Acknowledge and reward supervision that is done well.

3. **An understanding of the purpose of supervision.** Supervisors who are given a clear understanding of the purposes of their supervisory

activities are more likely to devote sufficient time and energy to supervision and to perform effectively. Job descriptions of those being supervised should be clear to the supervisor.

4. **Clearly established supervisory schedules to ensure sufficient frequency and length of sessions with the person being supervised.** Supervisors can be clear about their own duties if they have specific guidelines about the amount and type of supervision required.

5. **Appropriate tools for supervisory activities.** The work of supervisors is greatly aided by tools such as checklists or supervisory review forms.

6. **Special training in supervision and continuing education for supervisors to keep up to date on technical issues.**

Levels of supervision

Who should supervise whom?

Supervision of the Volunteer Health Sister Program should take place at 4 levels:

1. **Supervision of Volunteer Health Sisters** should be carried out at the local level by a supervisor. Usually the trainer will initially serve as a "Trainer/Supervisor" until a Supervisor from the community is recruited and selected specifically for supervisory duties.

2. **Supervision of Volunteer Supervisors** will take place once the Trainer/Supervisor has appointed a local Supervisor or Supervisors. It is preferable to appoint a literate woman as a Supervisor because she can complete the supervisory checklists. A non-literate Supervisor can be very good at supporting and improving the performance of a Volunteer, but she will not be able to complete any supervisory checklists.

3. **Supervision of Trainer/Supervisors** should be carried out at the regional level by qualified assessment teams from the Regional Health Service Administration, including the regional MCH Officer. This level of supervision may be undertaken in collaboration with the Ministry of Public Health.

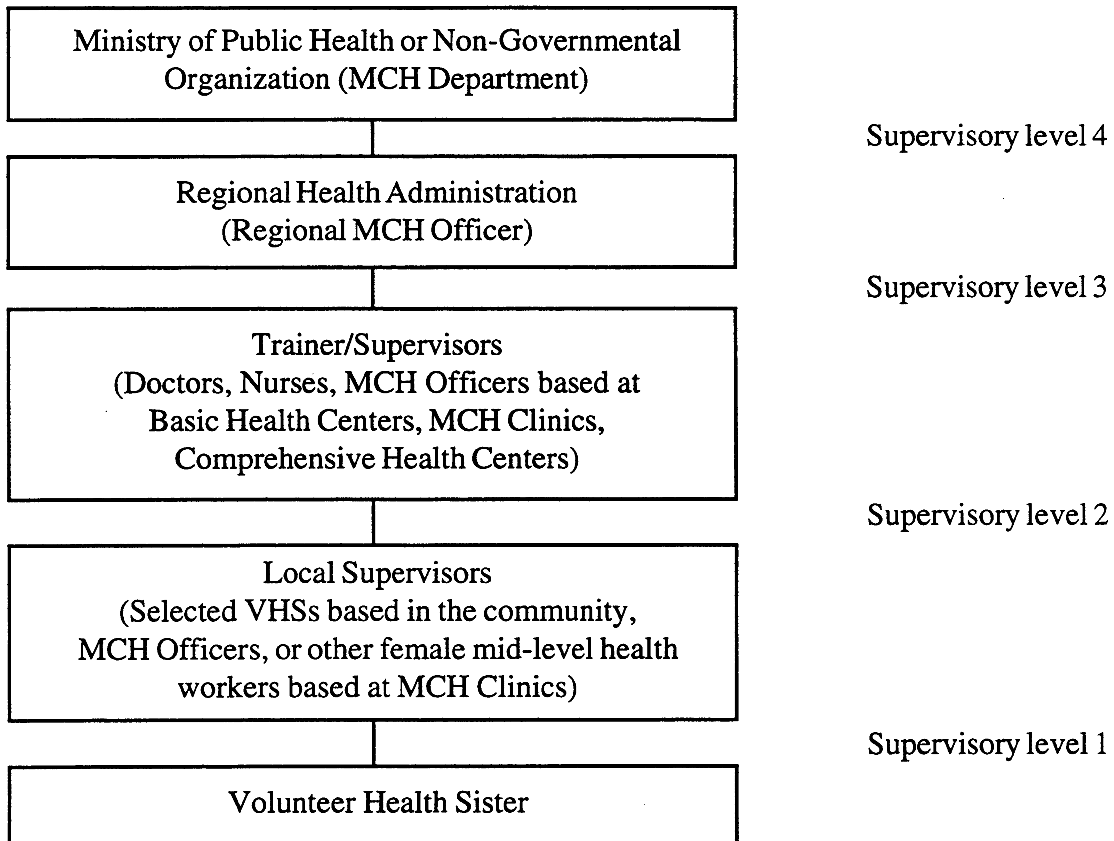
4. **Supervision of Regional Health Administration MCH Program Managers** should be carried out by the central Ministry of Health MCH Department. Ideally, in a decentralized primary health care system the central Ministry extends authority and responsibility to the regional (or provincial or district) administrative structures of the country. For this reason, MCH Regional Health Officers have recently been assigned to several regions of Afghanistan to strengthen the link between the MCH Program of the central Ministry and the regions. The central Ministry MCH Department is therefore responsible for

supervising the MCH Regional Health Officers who form the third level of the VHS Program supervisory structure.

Depending on the size and scope of a non-governmental organization conducting the Volunteer Health Sister Program, the NGO would have their MCH Program staff monitor their VHS Program at the regional level or, in a relatively small program, may directly supervise the Trainer/Supervisors at the health facility level.

Exhibit 7.1

Levels of Supervision



Purpose of supervision

Why is supervision important?

Supervision has several purposes. First, supervision is a form of quality control: A Supervisor needs to check, in the working environment, that the health worker has mastered the content of the modules and that she can effectively and accurately teach the prime health messages to others. Second, supervision is a form of quantity control: A Supervisor should monitor the quantity of

services. The quantity of services provided by a Health Sister, for example, can be expressed by the number of people reached or the amount of individual health products distributed.

Supervision is a form of quality control and quantity control.

Advantages of a good supervisory system:

- Problems can be prevented or solved before they get out of control
- The person being supervised gets support for the work and considers the work valuable because it is recognized, leading to more motivation
- The Supervisor and staff can communicate about expectations when supervision is regular
- Qualitative and quantitative feedback from supervision is useful for continual improvement of the program and is necessary for planning, budgeting, and program development

Informal versus formal supervision

Supervision of volunteers is based on non-monetary incentives

Supervision of Volunteers is informal, whereas supervision of paid workers is formal supervision. Therefore, the first level of supervision in the Volunteer Health Sister Program is informal, but the second, third, and fourth levels are formal.

The structure, methods, and tools for supervision are similar for formal and informal systems, but their incentives differ. The supervision of Volunteers is based on non-monetary incentives to boost productivity. The Volunteer worker has the advantage of being able to work whenever she wants, based on her particular lifestyle. A Volunteer is usually motivated by gaining knowledge and learning new skills to improve the health of her family. When knowledge and skills are extended to benefit other members of the community, the Volunteer can also improve her status within the community. A Volunteer who performs exceptionally well may also be promoted to Supervisor. There are also several other non-monetary incentives for informal supervision systems.

Non-financial incentives for motivating Volunteer Health Sisters include:

- Improved health knowledge and skills to improve the health of the Volunteer's family
- Improved status within the community
- Food
- Free health services or drugs for the Volunteer and her family

- Priority treatment at the health facility for the Volunteer and her family
- Free education for the Volunteer's children
- A gift from the community, such as a chadre
- An opportunity to work at the clinic

The Supervisor of Volunteers should understand the motivational forces for Volunteers in order to support and motivate them. For example, a Supervisor who finds that a Volunteer does not know when to introduce supplementary foods to an infant can say, "it is important to know that you should introduce additional food at 4 months of age in order for your child to have good health and normal growth." A Supervisor who finds that a Volunteer is not very active, and only waits for an occasional visit by her extended family members, should try to determine what the reason is. If the woman does not have permission to go from house to house, the Supervisor can not necessarily increase her activity level, but can at least focus on the quality of the Volunteer's work, such as her ability to deliver the correct health messages.

Establish a minimal standard of activity

Initially in the developmental stages of a VHS Program, a minimum standard of activity may be established to qualify a Volunteer as a VHS. For example, a Supervisor may continue to support, visit, and resupply as necessary anyone who has at least 2 health contacts per month, but the Supervisor should focus more time and energy on Volunteers with higher productivity levels. Once a norm has been established in a particular site or region, the Supervisor can clearly communicate who can be considered an "active" VHS. After a VHS Program has been functioning for 2 years, for example, the regional health administration may decide that an active VHS is one who has at least 5 health contacts per month. Any Volunteer not consistently meeting that level would not be resupplied or supervised until she decides to resume as a Volunteer. There is no penalty for a Volunteer who stops her activities, only encouragement to continue to spread her knowledge and skills.

Paid health workers (including clinic staff who are Trainer/Supervisors and MCH Regional Health Officers) are also often motivated by opportunities to learn and to help their community, but they also have monetary incentives and job security to motivate them. There is a difference between supervising someone who works for payment and someone who works voluntarily, because a paid staff member who does not perform well risks losing salary and job security.

Policy of incentives for local VHS Supervisors

Payment should be based on performance

Local VHS Supervisors, who are recruited specifically to support Volunteers, should receive monetary payment either from the community or from the formal health care system. It is important for the Supervisors to receive some

form of compensation because a supervisory system requires that they have regular contact with the Volunteers.

The decision will undoubtedly depend on the availability of resources within the community, within the regional health administration, or at the central government level. An NGO may be willing to provide payments to Supervisors, or payments for Supervisors could be shared between the community and other sources of funding. The important point is that payment for local Supervisors should be based on their performance, not only on the frequency of supervisory visits.

> *A good supervision system emphasizes the performance of staff, not only the frequency of supervision.*

Policy of incentives for formal VHS Program staff

The supervisory tasks of the Trainer/Supervisors, MCH Regional Health Officers, and the Ministry's or NGO's MCH Department should be considered part of their routine responsibilities. However, those who perform their supervisory responsibilities well should be rewarded! (Rewards may be promotional or educational opportunities.)

Styles of supervision

Always encourage volunteers

There are three main styles of supervision: autocratic, anarchic, and democratic.

Do what I say! (Autocratic)	Do what you like! (Anarchic)	Let's agree on what we are to do. (Democratic)

Most people prefer to work under a democratic Supervisor, but this does not mean that the democratic style is always best. The choice of supervision style depends on the kind of work to be accomplished. Job factors include complexity or difficulty, the relative need for quick decisions, the need for creativity versus ability to follow instructions, and the characteristics of the people to be supervised (including their competency, reliability, and experience). In certain circumstances, the Supervisor must be authoritative, in the sense that instructions cannot be subject to question or individual style. This is particularly true for tasks demanding consistency or for people with limited skills or experience. For example, a more authoritative style is in order if a Supervisor finds that a Volunteer Health Sister is preparing overly-concentrated Oral Rehydration Solution. Authoritative does not mean impolite, but it is a firm instruction. It is

also important to remember that the Health Sisters are working voluntarily; they need to be encouraged in the activities in which they are performing well, and advised in areas that need improvement.

Supervision in action

The steps to develop a supervisory system follow.

How to develop a supervisory system

STEP 1: Define and explain the supervisory structure to program staff.

The first step in developing a supervisory system is to define the supervisory structure, as described above in Exhibit 7.1, and to explain that structure during discussions with all program staff. Include sessions on "Supervision" during the Training of Trainers Workshops.

STEP 2: Clarify job descriptions.

The second step is to clarify the job description of each category of worker in the VHS Program so that everyone understands the incentives for each category of worker. (See Chapter 2, "The Relation of the Volunteer Health Sister to the Primary Health Care System.") The responsibilities of the Volunteer Health Sister Supervisor are shown below in Exhibit 7.2.

Exhibit 7.2

Job Description of the VHS Supervisor

Supervisors are responsible for supporting the work of the Volunteer Health Sisters in their specified areas in order to ensure that the Volunteers are disseminating accurate and complete prime health messages, providing instructions for home care for illnesses such as diarrhea and common cold, and referring patients as required. A Supervisor who is also a trainer is the link between the Volunteers and other members of the health team. A local Supervisor, whose duties are only supervisory, is the link between the Volunteer and the Trainer/Supervisor.

Specifically, the tasks of the Supervisor are to:

1. **Provide Maternal and Child Health services** similar to the Volunteer, but limited in amount because of time required by other responsibilities.
2. **Provide technical support to the Volunteer Health Sisters** by upgrading their health information and services, and by helping solve work-related problems.

Continued

Continued

3. **Provide morale-building and psychological support.**
4. **Monitor the Volunteer Health Sister's quality of service and performance** by observing patient encounters and by assessing her work using the Supervisory Review Form.
5. **Edit and monitor Volunteer service outputs** (quantity of services) by reviewing her Monthly Monitoring Form and (for literate Supervisors) tabulating them every six months.
6. **Promote linkages** between the Volunteer and other health providers; for example, informing Volunteers when a mobile vaccination team is arriving so that they can inform the community, or reinforcing instructions about where they should refer cases.
7. **Deliver health products** to the Volunteers.
8. **Serve as a community liaison** for the program. Supervisors may discuss how the Volunteer Health Sisters can help out in health care emergencies; for example, if there is an earthquake, Volunteers can provide first aid.

STEP 3: Recruit and select Supervisors.

The third step is to recruit and select Supervisors. Initially, the trainer performs the function of supervision as a "Trainer/Supervisor", but after the program is underway, the task of supervision can be turned over to someone else. Local Supervisors can be:

1. The most qualified and dedicated Health Sister(s)
2. Someone who has been informally serving as an assistant to the trainer, such as a Maternal and Child Health Officer or mid-level practitioner
3. A local dai who has completed training as a Health Sister

Methods of recruitment include:

1. Recommendations by the Trainer/Supervisor
2. Recommendations by the community
3. Self-referral

For selection of a Local Supervisor it is important to establish criteria and an objective selection process, especially when there are financial incentives. If the Trainer/Supervisor decides to select among the current Volunteer Health Sisters, the selection criteria should include:

1. Same basic criteria as the Volunteer Health Sister PLUS
2. Demonstrated ability as a Volunteer as shown by favorable supervisory reviews
3. Natural leadership abilities
4. Minimum of 6th grade education preferred

The selection process can be carried out in several ways. It is preferable that the Trainer/Supervisor first eliminate all unqualified candidates. The final selection can then be done by any combination or single one of the following:

1. Selection by members of the community (e.g., community leaders or respected members of the local health team) in order to enhance their involvement
2. An interview by the Trainer/Supervisor or a selection panel of respected women in the community
3. A test of skills (including literacy, if possible)

Characteristics of a good Supervisor

The selection of Supervisors should also consider the characteristics of a good Supervisor. The characteristics of a good Supervisor are:

- Mastery of relevant technical knowledge and skills
- Ability to teach and learn
- Ability to identify, analyze, and solve problems
- Ability to lead and influence others; someone who is respected
- Loyalty to the organization in the pursuit of the program's objectives
- Willingness to assist others
- Fairness
- Ability to help subordinates to identify and solve their problems, and to help others learn to solve their own problems
- Willingness to listen to their subordinates' concerns and finds ways to address the concerns to meet work objectives
- Ability to give instructive guidance and useful advice as required

STEP 4: Train Supervisors

"Trainer/Supervisors" acquire their supervisory training during the series of four Training of Trainers Workshops (see Chapter 6, "The Training System"). Once they have developed the Volunteer Health Sister Program in their local-

ity, it may be more efficient to pass on regular supervisory tasks to a local Supervisor.

Training for local Supervisors takes place at the VHS Program site. The Trainer/Supervisor can provide on-the-job training by explaining the job description and showing the new Supervisor how to schedule and conduct supervisory visits using the supervisory review form, how to review and interpret Monthly Monitoring Forms, and how to distribute products.

The Supervisory Review Form

The Supervisory Review Form is a checklist

How does one measure whether a Volunteer Health Sister is performing all her duties effectively and accurately? The VHS Supervisory Review Form (Exhibit 7.3) is a checklist that the Supervisor uses to assess each point of the Volunteer Health Sister's skills, knowledge, and approach to teaching others. The best time to conduct a supervisory review is during an actual session in which the Volunteer Health Sister is teaching other women. If this is not possible, an alternative is to role play the lessons of each module and to complete the form.

To use the form, the Supervisor should use the list of prime health messages for each module that the Volunteer has learned, and check each point carefully for accuracy and completeness. It is important to note specifically any inaccuracies in the content or points that were not mentioned. At the end of the review, the Supervisor should find a quiet place where they can speak privately, and discuss any portions of the module which the Volunteer Health Sister had explained or demonstrated incorrectly, or not at all. By giving constructive feedback, the Supervisor can help the Volunteer master the material. The specific points for follow-up should be agreed upon with the Volunteer and noted for the next scheduled supervisory visit. The Supervisor should date the completed review forms and keep them on file, and should follow up the problem areas at a later date to be sure the material is learned correctly.

> *The Supervisor should give constructive feedback in a kind, supportive manner.*

The Trainer/Supervisor should use the same VHS Supervisory Review Form to supervise local Supervisors, but should also consider the points listed above as characteristics of a good Supervisor.

The Supervisory Review Form used to supervise the Volunteer becomes part of the assessment form used to supervise Trainer/Supervisors. (See the "VHS Program Assessment Form" in Appendix A.) If the Trainer/Supervisor has not

Exhibit 7.3

VHS Supervisory Review Form

Name of VHS: ______________________
Name and Signature of Supervisor: ______________________
Date of Review: ______________________
Service Village of VHS: ______________________
Module Reviewed: ______________________

I. Format	**Good**	**Needs improvement**
1. Opening/Introduction		
2. Statement of Purpose		
3. Opportunity for Questions		
4. Closing		

II. Content	**Good**	**Needs improvement**
1. Prime Messages (list by #)		
2. Note inaccuracies or parts omitted for every prime message observed		

III. Techniques used	**Good**	**Needs improvement**
List # of prime message next to the technique used		
1. Role Play		
2. Demonstration		
3. Discussion		

Continued

Continued

4. Lecture

5. Question and Answer

6. Other (please specify)

IV. Teaching aids

List each type of teaching aid or item used; note the number of the prime message for which it was used. Note whether or not it was supplied by the VHS Program.

Type/Item	# Prime Message	Supplied by VHS Program
1.		
2.		
3.		
4.		
5.		
6.		
7.		

V. Rapport	**Good**	**Needs improvement**
1. Polite		
2. Handled problems well		
3. Established comfortable communication		
4. Used simple words		
5. Other (describe)		

VI. Additional Comments

clearly mastered the material, then the information which the VHS receives will undoubtedly be incomplete or inaccurate.

The supervisory schedule

A schedule promotes regular supervision

Supervision of Volunteer Health Sisters should be carried out monthly. Supervision of local Supervisors should ideally be carried out at least once every three months. Periodic supervisory assessments of Trainer/Supervisors should take place every six months.

For regular and timely supervision, it is useful to prepare a supervisory schedule. The frequency of supervisory visits depends on the local situation, the stage and state of the program, and the availability of transport and personnel. As mentioned previously, supervision should initially take place at least once a month, but preferably twice. Exhibit 7.4 shows a sample schedule for monthly supervisory visits the number of supervisory visits made for each Volunteer Sister as of mid-May 1994.

Exhibit 7.4

VHS Supervisory Schedule for the Year 1995

		Month											
#	**VHS's Name**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
1	Bibi Jan	1	1	1	1	1							
2	Gul Shireen	1	1	1	1	1							
3	Fahima	1	0	1	1	1							
4	Sultana	1	1	1	1								
5	Salima	1	1	2	2								

Planning a supervisory visit

How to prepare for a supervisory visit

Before making a supervisory visit, the Supervisor should review the records to be aware of:

1. **The local targets** to achieve the Program's objectives. Local targets may include the number of Health Sisters, modules covered, or number of beneficiaries being reached

2. **Which modules the Volunteer Health Sister has completed** in training and which ones need to be supervised during the visit to assure she is meeting the standard

3. **The progress the Program has made to date** in relation to the targets that have been set

4. **Problems** that have arisen in implementation
5. **Supplies, schedules, forms, or curriculum** (prime health messages) that are needed for the supervisory visit

Conducting a supervisory visit

How to conduct a supervisory visit

To conduct a supervisory visit with a Volunteer, the Supervisor should:

1. **Set a time and place** for meeting with the Volunteer Health Sister (if it has not already been established) to observe her during a patient encounter in which she gives health education, a health service, and/or a referral.
2. **Complete the VHS Supervisory Review Form** for each topic covered during the contact with a recipient. Provide encouragement and praise for good performances and assistance in improving weak points. If it is not possible to observe the Volunteer Health Sister directly, the Supervisor should set up a role play for the same purpose.
3. **Discuss problems** that occurred during the month.
4. **Give feedback on cases referred** by the Volunteer Health Sister to the health facility.
5. **Check the VHS's kit** regularly, at least every 3 to 6 months, to see if it is in order and if it is being used properly.
6. **Resupply** kit items.
7. **Revise topics** covered during the training, as appropriate.
8. **Review the Monitoring Form** for proper completion and level of monthly activity.
9. **Set the time and place** for the next supervisory visit.

If possible, the Supervisor should also visit the Volunteer Health Sister in her home at least once a month for an informal discussion. The Supervisor should also interview some community members to follow up on the accuracy of the information given by the Volunteer and to understand their reaction to her services.

Similar activities should be carried out by a Trainer/Supervisor when supervising the local Supervisors. The Trainer/Supervisor should collect the records (Supervisory Review Forms, Monitoring Forms, notes for follow-up) of the Volunteer Health Sisters at the health facility and update them regularly. The Trainer/Supervisor can collect and review the records during the quarterly supervisory visits with local Supervisors. During this quarterly meeting, the Trainer/Supervisor should also arrange with the local Supervisor to make some home visits with the Supervisor to compare the results of the forms with actual observations.

Using information generated by supervisory visits

It is important for people who have a supervisory function to remember that:

Supervisory visits provide inform–ation to improve the program

> *Supervision is a helping process.*

Supervisory visits provide information to improve the program. The feedback to the person supervised is information which is directly shared in order to motivate, solve problems, and provide guidance. The information from supervisory visits can also be used with the information from monitoring tools to get a sense of the impact and to determine what to focus on with the supervisee (see Chapter 10, "Monitoring and Evaluation"). For example, the Supervisory Checklist reveals whether a Volunteer knows how to treat a child with diarrhea. The monitoring tool shows whether or not she is distributing ORS. If the supervisory checklist indicates that the Volunteer knows how to mix ORS and teach mothers about it, and the monitoring tool indicates that she has had many health encounters for this purpose, she is having a positive impact.

> *Coverage X Effectiveness = Impact*

Conversely, if a supervisory review indicates that the Volunteer correctly prepares ORS, but her monthly monitoring form shows that she is not teaching other mothers, the (literate) Supervisor knows that she has potential to share her knowledge, but she is having little impact. The Supervisor should praise the Volunteer for her mastery of the information, but find out why her activity is low and encourage her to spread her knowledge.

Trainer/Supervisors who have trained dozens of Volunteers as indicated by the 6-Month Monitoring Form summary, but whose supervisory reviews indicate that their teaching skills need great improvement, may have less impact than Trainer/Supervisors who have trained only 10 Volunteers, but who have trained them well. The use of supervisory review results, in conjunction with information generated from tools such as the monitoring forms, helps the Supervisor to focus the feedback given to the supervisee.

EXERCISES

EXERCISE 1

STYLES OF SUPERVISION

LARGE GROUP ROLE PLAY

Directions: Select 3 groups of 3 people to conduct a role play in front of the entire group. Each group will demonstrate a scene with a different style of supervision. At the end of the 3 role plays, ask each person who played the VHS how she felt during the supervisory visit, why she felt that way, and how she feels about her job as a VHS after the interaction with the Supervisor. How does the supervisory style of the Supervisor affect the performance of the VHS? Discuss.

Roles: 1 VHS, 1 Supervisor, 1 Village Woman who has a malnourished child

Situation: The Supervisor is observing the VHS during a home visit as she discusses the prime health messages for nutrition. The first group should role play a scene in which the Supervisor uses an *autocratic supervisory* style. The second group should role play a scene whereby the Supervisor uses an *anarchic* style. In the third role play, the Supervisor should use a *democratic* style.

Time: 60 minutes (15 minutes per role play, 15 minutes discussion)

Materials: Nutrition poster

EXERCISE 2

USING THE SUPERVISORY REVIEW FORM

SMALL OR LARGE GROUP ROLE PLAY

Directions: Divide into groups of 4 to role play the following situation, or select a group of 4 people to enact the situation in front of the large group. After the role play, return to the large group. Review how the form(s) were completed. Discuss when, where, and how should the Supervisor give feedback to the Volunteer.

Roles: 1 VHS, 1 Supervisor, 1 Village Woman who has a 6 month old child who has not received any vaccinations, 1 Observer

Situation: The Supervisor is observing the VHS during a home visit. Using the prime health messages and a poster, the Volunteer is encouraging the mother to take

Continued

Continued

her child for vaccination. The Supervisor should use the Supervisory Review Form to evaluate the VHS. The Supervisor gives feedback to the VHS.

Time: 30 minutes (15 minutes role play, 15 minutes discussion)

Materials: Immunization poster, Supervisory Review Form, pen or pencil

EXERCISE 3

CONDUCTING A SUPERVISORY VISIT

CASE STUDY

Directions: Read the case study to the entire group. Ask the questions as they are indicated.

Dr. Nasir was making his fourth supervisory visit to meet with a Volunteer Health Sister, Bibi Shireen. He brought the Supervisory Review Form, his *Volunteer Health Sister Program Training Manual*, and a kit with supplies. At her home, he asked if she could arrange a health education discussion or a home visit for him to observe. (Dr. Nasir had a good relationship with the community; he had often visited sick individuals at their home and it was therefore not a problem to observe the Health Sisters in many homes.)

Bibi Shireen said that she had been very busy lately, and had not had time to make any visits. When Dr. Nasir asked how long ago she had carried out any VHS tasks, it became clear that she had had only 2 patient contacts over the past month.

1. What should Dr. Nasir do?

Bibi Shireen wanted to discuss her problems. Dr. Nasir decided to listen to her in order to discover the source of her problems which could be affecting her VHS responsibilities. "I have too much to do," she complained. "In addition to household chores and taking care of the children I have too many things to do; giving health education, giving out soap and ORS, and having people come to me for advice takes a lot of time."

2. What are possible underlying reasons which may be causing Bibi Shireen to say she is too busy?
3. What other information does Dr. Nasir need to know before he can help her to be a more productive Volunteer?

Continued

Continued

Dr. Nasir looked through his papers to find the notes from his last visit and to check Bibi Shireen's monitoring tools over the last 3 months. He knew that a poor supervisory approach would be to say "work faster" and then continue with his routine supervisory activities with other VHSs. Such a response could result in the loss of an active worker due to a lack of understanding and failure to listen and motivate. Dr. Nasir noticed that when Bibi Shireen had started as a Volunteer Health Sister she had dozens of health contacts each month, but each month the number had decreased. He asked her whether she had usually gone to visit people in their homes to carry out her services or whether people came to her. She replied, "In the morning I used to go to different homes to give health education; in the afternoon women were coming to me, asking for advice. Then Begum Taj, the dai, got very jealous because she thought I was smarter than she is. Also, my husband got angry because I was spending too much time doing my Volunteer duties."

4. What should Dr. Nasir suggest?
5. How could Bibi Shireen better arrange her time in order to resume her role as an active Volunteer Health Sister?

Time: 20 minutes

Materials: Case study

CHAPTER 8

Management of the Volunteer Health Sister Program

This manual has been written for both the manager and the Trainer/Supervisor of a Volunteer Health Sister Program. This chapter, while important for Trainer/Supervisors, is directed primarily to the VHS or MCH program manager responsible for developing the overall Volunteer Health Sister Program.

What is management?

A commitment to extended health information and services

Management has a variety of definitions. For the purpose of the Volunteer Health Sister program, the most relevant are:

Management is:

- the means of achieving objectives toward a goal in an efficient manner
- getting things done through people
- efficient use of staff, materials, and money

All of these concepts are based on a commitment to a purposeful action and not just action for its own sake. The management of a Volunteer Health Sister Program is based on a commitment to extend health information and services to individuals in the community who do not have ready access to health care.

Management terms

Getting ready to plan a program

Whether you are planning for a VHS program, an immunization program, a regional health program, or for an organization, the questions that you ask in the planning process are the same.

What are we here for?

What are we trying to achieve?

How will we achieve it?

What will each strategy achieve?

What activities are required?

What resources will we need? How will we pay for them, and what will the individual activities cost?

The terms that are used in this chapter to describe these questions are defined in Exhibit 8.1.

Exhibit 8.1

Management Definitions

Activity	the intervention which is necessary to accomplish each objective.
Budget	a detailed financial plan of what it will cost to carry out the activities in the work plan.
Financial Plan	a statement of the expected expenses and revenues (with sources specified) in the next 3 to 5 years.
Gantt Chart	the summary of a work plan, presented in the form of a chart showing the major activities planned in their chronological sequence, as well as the week or month in which they will be conduced, and the person responsible for carrying them out. It sometimes includes the resources necessary to carry out the activities.
Goal	the proposed benefit of the program for the population.
Mission	a general statement of the type of organization, its main purpose, and its values.
Objective	a specific statement of the work you intend to carry out; or the quantifiable outcome or benefit that is expected as a result of implementing a strategy.
Strategy	a statement that describes how the goal will be met; for example, which types of services will help the organization achieve its goal most effectively.
Work plan	a document developed by the manager and the staff, covering a specified period of time, that lists all planned activities, the date by which they will be accomplished, the resources that they will require, and the people responsible for carrying them out.

Management by objectives

Management by objectives helps supervisors and staff to see clearly where they are going, and to measure their progress in getting there. The first step in preparing a plan is to state the mission of the organization. A mission statement for the MCH Department of the Ministry of Public Health could be:

Management by objectives helps you to see where you are going

Mission:	Improve the health and well-being of women and children throughout the country through the provision of maternal and child health services.

It is important that everyone involved in the Volunteer Health Sister Program understand its goal, or the intended benefit of the program to the population.

Goal:	Improve the health status of women and children by increasing access to health information and services.

Strategies map the route that an organization chooses to take in order to achieve its goals. Developing strategies entails considering all possible strategies and then selecting several key strategies which will best help to achieve the goal.

Strategy:	Phase the VHS Program by introducing it into 2 regions next year and into 2 more regions the following year.

Specific measurable objectives need to be developed and completed in order to achieve the goal of the program.

Objective:	Train 100 Volunteer Health Sisters within the next year at 12 different sites.

Objectives can be either program related objectives or organizational objectives. Both types are described in measurable terms and indicate a specific time period during which results will be achieved.

Program related objectives state the anticipated results or outcomes of the program, representing changes in the knowledge, attitudes and practices of the program's beneficiaries; such as "decrease the number of childhood injuries as shown by the fact that at least 1 primary caretaker in 30% of the program's catchment area can, by the end of this year, correctly explain 5 ways to prevent household injuries."

Organizational objectives state the specific, observable changes in the structure or management of the program that will improve efficiency, sustainability, or effectiveness, such as the "to improve the ratio of supervisors to Volunteers from 1:25 to 1:15 within the next year."

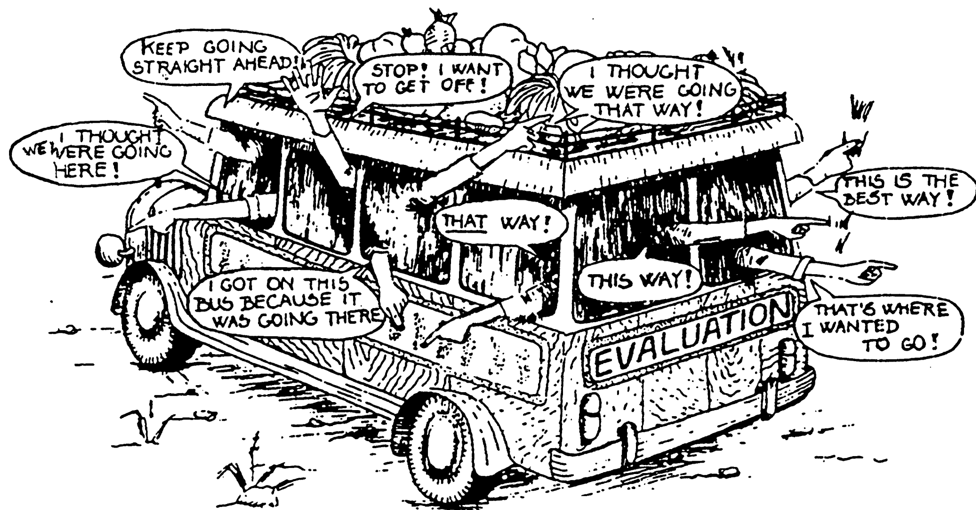
All objectives should be *specific, measurable, appropriate, realistic, and time bound.* The statement of an objective must include:

- what is to be done
- who will do it
- when it will be done
- where it will be done

A clear statement of objectives makes it possible to evaluate how effective you are in reaching your objectives, and therefore, in reaching your goal.

Defining the goal and objectives of the Volunteer Health Sister Program is best carried out with a planning team. It is important that everyone involved in the program (managers, senior officials, Trainer/Supervisors, and the Volunteers) understand where the program is going, how quickly, and how it will get there.

If you don't know where you are going, how will you get there?



Objectives must be within the scope of the organization's overall mission. For example, if the organization provides health services to a rural population with the aim of improving their health status, its objectives must be consistent with that purpose. Two examples of objectives within the mission of a Basic Health Center would be to:

- immunize against polio 80% of the children up to 1 year of age, in Khanabad District, by the end of 1996, using mobile vaccination teams
- hold at least 2 health education sessions per week (1 for women and 1 for men), at the Khanabad Basic Health Center, during 1995, using mid-level clinic staff

An example which would *not* be consistent with the mission of the health center would be to:

- construct an irrigation system for 25 acres of land outside Khanabad, by the end of 1996, with the assistance of an engineering team.

The following checklist is useful for developing objectives. A well-formulated objective:

- starts with an action verb such as "train", "supply", or "supervise", or an accomplishment verb such as "implement", "increase", or "reduce"
- specifies the key result to be accomplished
- specifies the target date for its accomplishment
- is specific and quantifiable, and therefore measurable
- specifies only the "what", "who", "when", and "where" and avoids venturing into the "why"
- relates directly to the person accountable
- is readily understood by those who will be contributing to its attainment
- is realistic and attainable, but still represents a significant challenge
- provides maximum payoff on the required investment in time and resources, as compared with other objectives being considered
- is consistent with resources that are available or anticipated

The list of objectives set for the pilot Volunteer Health Sister Program is presented as Appendix B. A sample list of these objectives is presented as Exhibit 8.2.

Exhibit 8.2

Sample VHS Program Objectives

- Improve the nutrition of infants by increasing the number of children who receive supplementary food by age 6 months by 10%, in the VHS Program catchment area.
- Decrease the child morbidity and mortality rates from acute respiratory infections (ARI) as shown by the fact that 60% of VHSs in the program area can correctly explain the difference between common cold and pneumonia.
- Develop a monitoring system in which 80% of Trainer/Supervisors hold regular (monthly) meetings with at least 75% of their Volunteers to review and collect the monitoring tools.

In order to reach an objective, you must determine which specific activities must take place, who will carry them out, and when.

> **Activity:** Conduct the Training of Trainers Workshop #1 "Introduction of the Volunteer Health Sister Program" for 12 participants selected as VHS program Trainer/Supervisors.

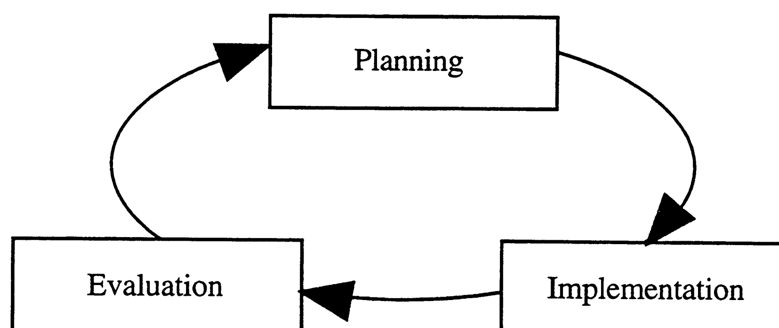
The management cycle

The management cycle minimizes waste

Another way to describe management is in terms of its functions. The functions of management are to plan, implement, and evaluate. These functions are often referred to as the "Management Cycle".

Exhibit 8.3

The Management Cycle



The most important aspect of this cycle is that the 3 functions are continuously linked. The planning process directs the implementation process. The evaluation of the implemented activities will produce results that should be incorporated into the plans for future implementation. The experience gained during implementation is incorporated into subsequent cycles and, particularly as the program expands, the management cycle minimizes the chance of making large mistakes and wasting valuable resources.

Planning

Steps in planning the VHS program

The first step in starting a Volunteer Health Sister Program is to discuss the concept of the program with all relevant authorities of the Ministry of Public Health and Regional Health Service Administrations.

> **STEP 1: Lay the foundation for the program by gaining the support of the authorities and local community leaders.**

The authorities can assign personnel to work on the team that will be responsible for designing the program. For NGOs, it will also be important to meet with the relevant public authorities to gain the support for the program. They can invite top or mid-level managers to join in the planning process. NGOs are encouraged to clarify their role vis-a-vis that of the government in relation to the VHS program. This will help to clarify the long-term sustainability of the program.

STEP 2: Establish a team.

The team should consist of representatives of departments directly involved in the program, such as the organization's MCH unit and training unit, as well as representatives (including community leaders) from areas where the VHS program will be implemented. It is important that members of the team are active, motivated, and interested in the program.

Once a team has been established it is useful to conduct a short seminar to introduce the team to the key concepts of the program, including the its rationale, strategies for improving access to health care and services for women and children, funding sources, and potential magnitude of the program.

STEP 3: Introduce the volunteer health sister concept to the planning team.

Throughout the planning phase, it is important to emphasize the need for community support, low-cost supplies, and alternatives for financing the program in order to build elements of sustainability into the program early on. The planning team should take the following sub-steps:

1. **Assess resource availability** to determine the magnitude of the program for the next 2 to 5 years.
2. **Discuss strategies** for developing the program in terms of phasing, administration, general locations of the program, and the capacity of the organization and the communities to carry out the program.
3. **Develop criteria for selecting of Volunteer Health Sister sites.** Criteria should include historically good performance as measured by monitoring and supervisory reports (see Chapter 7, "The Supervision System," and Chapter 10, "Monitoring and Evaluation"), interest in MCH as measured by high attendance of women and children or provision of family planning services, and a minimum time period in which the facility has functioned (e.g., at least 1 year in the same location).

4. **Nominate and select health facilities,** based on the above criteria, through which the program will be implemented. Include sites for initial implementation as well as potential facilities for an expanded program. MCH clinics are ideal sites in that female staff have greater access to train and supervise community women. However, motivated staff of BHCs and CHCs can be very successful in training and using indirect supervisory methods.

5. **Clarify the goal and agree on the objectives** of the program. The goal and objectives used for the pilot VHS Program can serve as a starting point (see Appendix B).

6. **Clarify the roles and responsibilities** of the planning team and the organization(s) who will implement the program. Develop job descriptions specific to the VHS Program, including qualifications. These should be done for the VHS Program Manager, Master Trainers, Regional Health Administrators, Trainer/Supervisors, Local Supervisors, and the Volunteers. The job descriptions presented in this manual can be useful for your program.

7. **Develop a concise work plan** with a timeline, activities, and targets for all departments involved in the program. In addition to a long-range plan covering the projected time period for the program, develop an annual plan. The yearly plan provides a tighter framework for implementation. (See "Developing a Work Plan" later in this chapter.)

Implementation

Implementation issues

Implementation is the point at which the work plan activities begin. Implementation of activities should follow the work plan, although the work plan can be reviewed and revised as necessary. Issues to consider in implementation are:

- **Can the existing organizational structure and staffing absorb the additional amount of work represented by the implementation activities?** If health facility staff are already busy with other activities, what measures can be taken to assure success of the Volunteer Health Sister Program?

- **Who at the selected clinics will be responsible for the VHS Program?** Generally the In-charge of the clinic will be responsible for the VHS Program, although another person may serve as the Trainer/ Supervisor or local supervisor.

- **Are there potential problems with political, public, or technical acceptability?** Are there political obstacles which prevent implementation of the program in certain geographical areas? If the position of MCH Regional Health Officer is vacant, perhaps another technical representative can be involved in VHS program planning and implementation until an appropriate candidate is hired.

- **Who will have primary responsibility for the program at each level of the primary health care system?** In the public sector, it is often essential to have a senior, central-level official be directly responsible for an initiative such as the Volunteer Health Sister Program. However, they may be too busy to devote significant amounts of time to it. Decentralizing the responsibility to individuals at the regional level has the advantage of placing responsibility on those who will be directly involved in implementation.
- **What source of funds and human resources will be used?** Are government funds or donor funds available for the program? What can the community provide in terms of resources for transportation or supervisor incentives? Female staff working at MCH clinics will generally have greater access to training and supervising Volunteers, but utilizing Basic Health Center staff offers an opportunity for greater coverage across regions because there are more Basic Health Centers than MCH clinics.

Evaluation

Evaluation leads back to future planning

The process of evaluation, which completes the first turn of the management cycle, is described in greater detail in Chapter 10, "Monitoring and Evaluation". In general, evaluation is the process of assessing the success of the program. Program evaluations can be carried out by staff of the organization or VHS Program, or by external evaluators.

Internal evaluation involves developing an information system that provides feedback on a continuous basis to managers at every level of the system (from the field site to the central level). Through internal evaluations, those responsible for the program can analyze information relatively quickly and respond promptly when problems are detected. Trainer/Supervisors can evaluate their own programs. They may detect a drop in productivity when reviewing Volunteers' monthly monitoring reports. In this case, the Trainer/Supervisors should try to determine the reason, which should lead to a search for a solution.

External evaluation is a process by which an evaluator or an evaluation team, not normally a part of the program, evaluates the program's performance to see if it is meeting its objectives. Often an external team is used for outcome evaluations, which would focus on morbidity or mortality statistics. Even if internal evaluations show that targets are being met, if there is no change in the health status of the population after a reasonable period, then the program would require adjustments. Objectives would need to be changed if they were not reflecting potential improvements in health status.

Developing a work plan

What is a work plan?

A work plan is a document for laying out the plans of the program.

The components of an annual work plan are:

- a summary of the long-range plan that covers the organizational mission, program goal and strategies
- program objectives for the upcoming year
- detailed activities related to these objectives in the form of a Gantt chart
- resource allocations
- a plan for monitoring and evaluation
- an annual budget

Work planning begins with the program's objectives

The VHS Program objectives are the starting point for the actual work planning process. The manager and other members of the planning team need to determine the activities that are required to achieve the program's objectives. For example, if one objective is to train Trainer/Supervisors in 6 provinces in 1996, one activity is to select the exact sites. Other activities would be to conduct a series of Training of Trainers workshops for the staff from the selected facilities.

The manager must consider different functional levels (central level, regional level, clinic, and community) and units of time, such as the upcoming year, quarter, month or week.

The annual work plan should include and justify the yearly operating budget. Shorter-term work plans are primarily for scheduling purposes and do not include budgets. An NGO or Ministry of Public Health should use individual work plans from different departments or regions to feed into an overall institutional plan. The format should be the same for all individual plans to facilitate the compilation into an overall organizational work plan. Their use should provide structure without restricting flexibility and creativity.

Work plans require a team effort

Work planning provides an opportunity for those who will carry out the work to participate in the planning process, and to ask questions about priorities, allocation of staff time, program targets, and internal and external coordination issues. For example, the scheduling of workshops should probably be coordinated with the training department of the organization. Analysis and discussion allow the planning team to understand why the activities are necessary and to determine the most efficient and effective way to carry them out.

Work planning is a continuous activity because the inevitable delays and changing circumstances in the internal and external environment affect implementation. Effective managers therefore regard work plans as tools rather than as final documents; they make adjustments to the plans as necessary.

How to prepare an annual work plan

The work plan allows one to compare what was planned with what was actually done, to examine the reasons for the difference, to see whether the activity actually brought about the desired result, and to decide what changes are required in the work plan. There are 5 basic steps in developing a work plan.

STEP 1: State organizational strategies and objectives for meeting the goal of the organization.

The first step in preparing the annual work plan is to state the organization's overall strategies and objectives for meeting its goal. Strategies are the methods which the organization will use to deliver services and implement its activities; for example, by focusing on MCH interventions or by consolidating supply depots.

STEP 2: State program strategies and objectives for meeting the program goal.

The next step is to lay out the specific strategies and objectives for its various programs, such as the Volunteer Health Sister program.

STEP 3: Determine activities and their timing.

The third step is to determine the major activities required to meet the objectives and to determine their timing.

STEP 4: List the resources required to carry out the activities.

After listing all of the activities, list the resources required to carry them out in terms of staff, money, and materials. At this stage it is essential to assure that the necessary resources are available; if not, this is the time to reassess priorities and modify the work plan to meet the resource base of the overall organization and the individual departments or programs.

Work plans can include cost estimates for each activity, which will be useful for preparing the annual budget. The cost of an activity may sometimes take into account the percentage of time each staff person will spend on the activity if the budget for the Volunteer Health Sister Program is expected to pay part of that person's salary.

STEP 5: Assign responsibility for each activity to specific people or departments.

Finally, determine who will be responsible for each activity.

Steps 1 through 5 can be summarized, as shown in the sample work planning tool in Exhibit 8.4 on the next page, prior to preparing a Gantt chart. (Note: Only one objective is shown for illustrative purposes.)

Preparing a Gantt chart

Summarizing activities in a Gantt chart

It is important to draw up a summary chart for the work plan and to include all activities for all objectives. The Gantt chart is an important reference which can be used by all program staff; it communicates in a concise way what the program will do and when.

A Gantt chart makes it easy to review the planned sequence of activities, to see where they may overlap, and to make sure that activities that must be completed in advance of others are in the appropriate order. In the Gantt chart, you should group the activities into key categories, such as training, supply, and monitoring and evaluation. Besides summarizing the activities and their order, the Gantt chart also indicates whether the workload is appropriately distributed among the staff or departments. An example of a Gantt chart adapted from a family planning program that used volunteers is shown as Exhibit 8.5.

Exhibit 8.4

Sample Work Plan

Mission: Improve the health and well-being of women and children throughout the country through the provision of maternal and child health services

Goal: Improve the health status of women and children by increasing access to health information and services

Strategies:

1. Implement the VHS Program on a phased basis, starting with two regions during the first year and introducing the program at facilities in two other regions during the second year.
2. Implement the VHS program through all MCH clinics in the regions and through the most utilized BHCs and CHCs
3. Maximize community involvement by involving community leaders in plans for the program at each site

Objective 1: Train at least 12 Trainer/Supervisors at each of 12 different sites in the north-eastern zone by the end of 1996

Activity	Dates	Responsible	Resources Needed
Identify Sites	January	MOPH/RHA MCH Departments	None
Organize T.O.T. team	January	TC/RHA	None
Schedule T.O.T.s	January	TC/RHA	None
Prepare/Obtain T.O.T. materials	January, June, August, November	TC/RHA	Manuals, paper, copying, stationery
Conduct T.O.T.s	March, July, September, December	TC	Per diem, transport
Conduct Field Assessments	May, October	MOPH/TC	Transport, equipment

* MOPH - Ministry of Public Health
RHA - Regional Health Administration
TC - Training Center staff

Exhibit 8.5

Gantt Chart

Project Activity	Project Months 1	2	3	4	5	6	7	8	9	10	11	12	Persons Responsible
Preparation													
Pack supplies into kits.	■												MOPH/RHA
T.O.T. workshops.	■			■					■				MOPH/RHA
Orient community leaders and members at village level.		■	■										RHA/TSs
Develop list of comunity contributors.		■	■										RHA/TSs
Local Activity													
Prepare maps.		■											FWAs, T/Ss, community
Conduct needs assessment.		■											T/Ss
Identify potential volunteers.		■											T/Ss, community
Selection and Training of Volunteers													
Recruit volunteers from each site.		■	■										FPAs, FWAs, T/Ss
Orient volunteers about their responsibilities.		■	■										FWAs, T/Ss
Review training curriculum.		■	■										T/Ss
Develop/obtain training materials.		■	■										T/C
Schedule volunteers for training in 2 groups.		■	■										T/Ss
Conduct initial training.			■	■	■	■	■	■	■				T/Ss
Service Delivery													
Conduct house-to-house visits.				■	■	■	■	■	■	■	■	■	Volunteers
Update monitor reports.				■	■	■	■	■	■	■	■	■	Volunteers
Supply products to clients and make referrals as needed.				■	■	■	■	■	■	■	■	■	Volunteers
Supervise volunteers.				■	■	■	■	■	■	■	■	■	T/Ss
Spot check Trainer/Supervisors and volunteers.				■			■	■	■	■	■	■	MOPH/MCH/RHAs
Monitoring and Evaluation													
Collect monthly monitoring reports.				■	■	■	■	■	■	■	■	■	T/Ss
Summarize all reports.						■			■				T/Ss
Monitor project performance in regional coordination meetings.			■			■			■			■	RHA
Conduct final evaluation at the end of the project year.												■	External evaluator

Evaluating whether objectives have been met

Using the work plan

As mentioned earlier, objectives are set during the planning stage of the program. As the program is implemented, various monitoring tools should be used to determine if the program is proceeding according to plan and whether it is meeting its objectives (see Chapter 10, "Monitoring and Evaluation"). If, for example, the objective is for the Trainer/Supervisors to train 100 Volunteer Health Sisters by the end of the year at 12 health facilities, and by July only 28 women in total have begun training, it appears unlikely that the target of 100 will be met by the end of the year. There are several possible reasons for this situation:

- The objective was too ambitious given the political, financial, and sociocultural environment.
- The program is facing difficulties in implementation. Perhaps the objective was not clear to the Trainer/Supervisors, or the second Training of Trainers workshop was delayed, causing delays in implementation of Health Sister discussion groups at the community level.
- At each of the health facilities, the Trainer/Supervisors trained only 2 or 3 Volunteer Health Sister candidates during the initial introductory phase of the program. However, all of them have already recruited and selected an average of 6 more candidates who will begin training in August. By the end of the year, the total number of Volunteers who have completed or are completing their initial training is, therefore, expected to be 100.

Clearly, setting objectives and laying out a work plan helps the manager understand how the program is succeeding and why there are deviations from the expected degree of progress. At any point during implementation, the program manager can revise objectives, revise the work plan, correct implementation problems, or be satisfied with a program that is achieving its objectives.

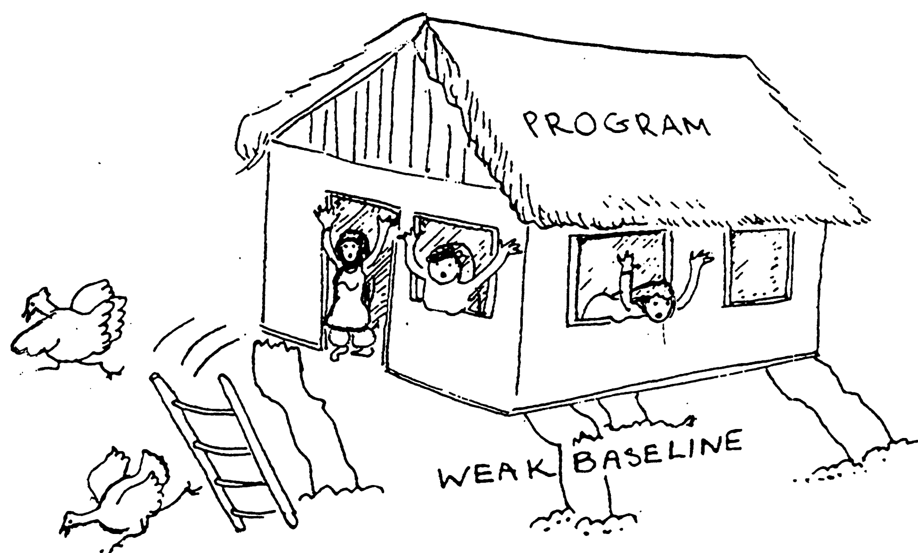
It is important, however, to notify top levels of management and donor agencies of any major changes required, especially if the work plan was funded based on a formal approval process. The best time to make major revisions is therefore at the beginning of each year, in order to match the change in activities with the organization's funding cycle.

The need for baseline information

The management cycle links planning, implementation, and evaluation. During initial program planning or at the start of the VHS Program, you should collect information about the health knowledge, skills, practices, and health status of the population to be served by the program in order to select meaningful objectives. The information collected should relate to the 7 prime health

message modules presented in Chapter 15 through 21, so that later you can evaluate whether or not women in the community have benefitted from the program.

Baseline information about the population can be collected from existing reports or surveys. It is best, however, to conduct a baseline survey, to collect specific information related to the Volunteer Health Sister Program.



> *Build your program from a strong baseline.*

Chapter 10 will go into detail about the role of evaluation in managing the Volunteer Health Sister Program. The important point to remember is that the results of evaluation should be used in the planning and implementation of future program activities.

> *Knowing why a program succeeds or fails is even more important than knowing that it does.*

Exercises

Exercise 1

Strategy Development

Small Group Exercise

Directions: Divide into groups of 3 to 5 people. Each group should pretend that the members are staff of the MCH Department of the Ministry of Public Health. The MCH Department has been granted funds to start a VHS Program at 50 sites over the next 3 years. The MCH Department's goal is to improve the health status of women and children by increasing access to health services and information.

Each group should develop a list of 5 to 10 strategies for developing the VHS Program. Each group should then agree on 3 or 4 strategies which it feels are most important. Small groups should then present to the entire group. Discuss how each group came to a decision about the priority strategies. Discuss the similarity and differences between the strategies selected by the different groups.

Time: 2 hours, 30 minutes (1 hour for small groups, 1 hour for presentations, 30 minutes for discussion)

Materials: Flip chart paper, markers

Exercise 2

Setting Objectives

Small Group Exercise

Directions: Divide into groups of 3 to 5 people. Each group should use the information in one of the following cases to develop program objectives and present the case and the proposed objectives to other groups. Discuss whether each objective meets the criteria for a well-formulated objective.

Case A The district EPI office has been closed for several years. The Ministry of Public Health reopened the office 1 month ago and assigned to it a director and an untrained team of 5 vaccinators. The office has been provided with cold chain equipment. Vaccines will be delivered after 1 month.

Continued

Continued

The EPI office is intended to serve a population of 150,000. The population is scattered among 25 small villages in addition to the district center. There are 15,000 children under age 5 who have never been vaccinated. The average number of children under 5 who need EPI services is about 300 per village.

Assuming that the director of the EPI program now has the resources to provide immunization to the eligible recipients throughout the district, set at least 3 objectives for the EPI program.

Case B

A newly trained Maternal and Child Health Officer (MCHO) has recently returned to her home district. The only MCH services available in the district are services provided by untrained dais. Before leaving the provincial capital for the position in the local clinic at the district center, she obtained the following data about the district:

Population 62,000
Number of villages 38
Number of untrained dais 75

There was no information about the location of the dais, but it was common knowledge that 10 to 12 of the smaller villages had no dais and some of the larger villages had 2 or 3.

A key responsibility of the MCHO is to improve the quality and the availability of MCH services throughout the district. A local NGO is willing to assist with resources for MCH activities.

Set at least 3 objectives for the MCHO to improve MCH services.

Case C

Dr. Daud recently completed 2 Training of Trainers workshops, where he learned about establishing a Volunteer Health Sister Program in his district. Several of his relatives have shown an interest in the health education materials he has brought from the workshop, so he has taught them most of the VHS curriculum.

Although this district is in one of the most conservative areas of the country, Dr. Daud has been able to gain the support of the community leaders to recruit and select an initial group of women to become Volunteer Health Sisters.

Set at least 3 objectives for Dr. Daud to develop the program at this site.

Time: 1 hour, 30 minutes (45 minutes for small groups, 45 minutes for 3 presentations)

Materials: Flip chart, markers

EXERCISE 3

WORK PLANNING

SMALL GROUP EXERCISE

Directions: Based on the cases in Exercise 1 above, small groups should continue to develop a work plan for at least one objective set forth in the previous exercise. The activities should then be summarized in the form of a Gantt chart. Present one or two Gantt charts to the entire class.

Time: 2 hours (1 hour, 30 minutes for small group, 30 minutes for presentations)

Materials: Flip chart, markers

CHAPTER 9

The Supply and Logistics System

Factors to consider when issuing supplies to a VHS

Trained health workers who are accessible to the population are essential to a primary health program, but workers alone are not sufficient. Teaching aids like posters and flip charts and medical supplies like ORS packets are also important for several reasons.

1. Soap, ORS, and other drugs appropriate for the health worker will improve patients' health
2. Teaching aids make lessons more interesting and effective
3. Items that can be given to target clients promote trust and involvement in the Volunteer Health Sister program

It must be recognized that teaching aids and medical supplies:

1. Require support from a logistics system that can assure continuous and sufficient supplies at the point where they are needed
2. Cost money
3. Must be suited to the competency level of the worker

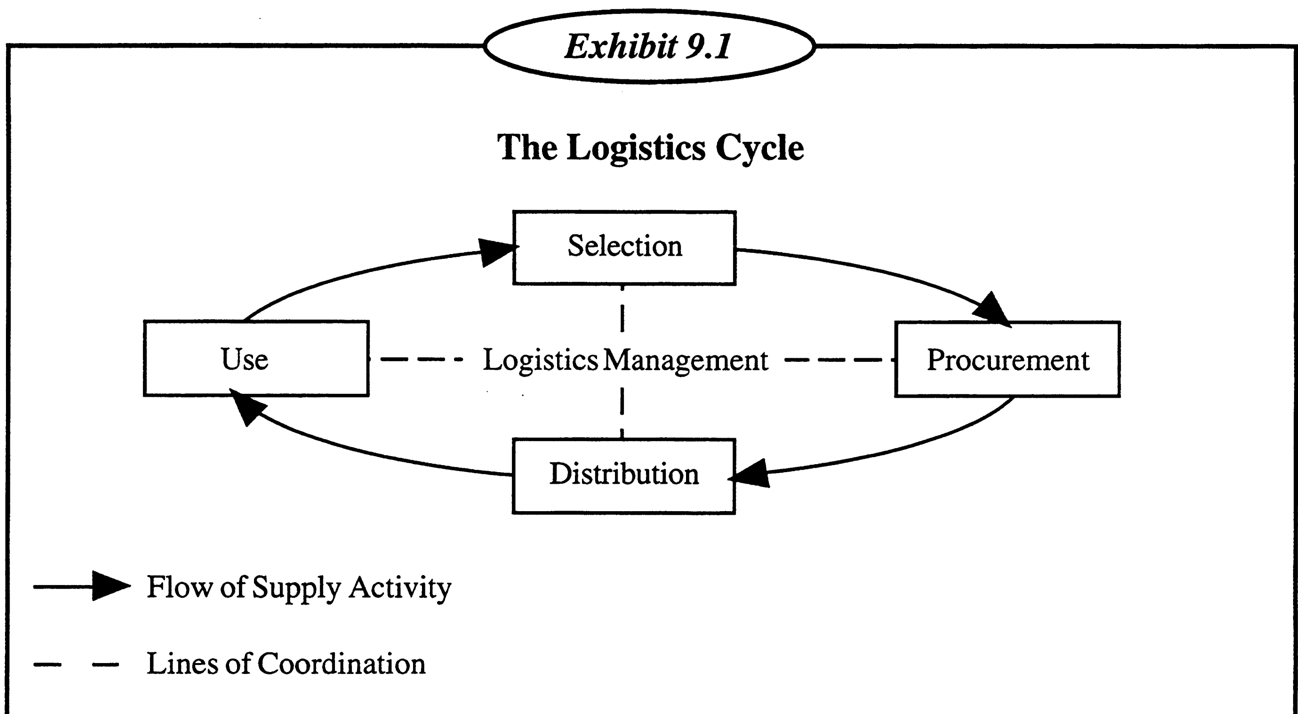
Giving people the knowledge, skills, and appropriate supplies to prevent or treat illness helps them take an active role in their own well-being. However, getting the items to those who need them requires an effective supply system. The manager responsible for the VHS Program may not be directly in charge of purchasing and transporting VHS supplies, but he or she needs understand the supply and logistics system in order to make sure the VHS supply needs are met. The VHS program manager will be responsible for estimating supply needs, specifying the quality of items, coordinating the supply system with the financial system, and predicting in advance where problems might occur.

The logistics cycle

What is logistics?

Logistics includes obtaining, maintaining, and transporting supplies. It involves delivering supplies on schedule to many people located in different places. A well-run supply logistics system is important because health workers must have medical supplies in order to carry out their job. A Volunteer who does not have soap, ORS, or posters may lose credibility with the patients in her area, as a clinic without medicines would lose credibility with its patients.

There are four key steps to running an effective supply and logistics system. They are shown in the following figure of the logistics cycle.



Selection requires determining which products should be available and in what quantities. Should a Volunteer be supplied with iron tablets (ferrous sulfate), bactrum, or paracetamol? How many packets of ORS should each Volunteer receive in her supply? The selection of medical supplies is an important step which requires attention to cost factors and the ability of the health worker to use a particular drug or health education materials.

Procurement includes purchasing methods, finance, terms of payment, sources of supply, and decisions to make or buy a product. There are usually several sources for obtaining health education posters, for example. To make the best decision, you should consider the cost of the posters, the quality, how long it takes for delivery, and what type of payment the seller agrees to. In fact, it may become obvious that to supply every Volunteer with a complete set of posters is too expensive and too difficult logistically. A Volunteer Health Sister Pro-

gram manager may decide to emphasize locally made teaching aids. Procurement must look at the broad picture of how many Volunteers need to be supplied, how often, and at what cost.

Distribution includes import management, inventory control, storage, waste management, and transport. Once procurement is completed, the next activities include storing and packing supplies and moving them safely and efficiently to their final destination in the Volunteer's household. Climatic conditions and geography must be considered when planning how to supply Volunteers living across rugged mountains or during months of heavy snowfall.

Use includes prescribing and dispensing practices, packaging and labeling, training personnel in the use of supplies, and educating consumers. When all of the previous steps of the logistics cycle have been undertaken, the next question is, "How do you assure that the Volunteer Health Sister uses the supplies effectively and distributes items appropriately?" Use of supplies primarily depends on how well training has been carried out: the training of Trainer/Supervisors, Supervisors, and of the Volunteers themselves.

Responsibility for selection, procurement, distribution, and use

Who is responsible for getting appropriate supplies to the Volunteers?

Most Volunteer Health Sister programs are conducted through health facilities, so their supplies should be linked to the facilities drug and medical supply systems. However, because the Volunteer Health Sister program may be considered an MCH activity, the MCH Department of the Ministry, Regional Health Administration, or NGO running the program should be involved in the selection of items. The Volunteer Health Sister Program manager should make sure that the processes of selection, procurement, distribution, and use of supplies meet a standard to successfully run the program.

Assuring quality in the supply and logistics system

Pitfalls encountered in the supplies and logistics system may affect the performance of the entire Volunteer Health Sister Program.

Potential pitfalls of the supply and logistics system

Selection should be efficient, not disjointed or haphazard:

- Purchase reasonably priced products. Shiny steel liter jugs or beautifully designed flip charts which are perfectly suited for a small pilot program may be too expensive for a nationwide program, while equally effective alternatives are available.
- Purchase appropriate products. Select pharmaceuticals that a Volunteer is competent in using.

- Purchase appropriate quantities. Overestimates of ORS needs result in spoilage; underestimates result in stockouts and lack of credibility with the program.

Procurement refers to obtaining pharmaceuticals and supplies, not only through purchase, but also through donations and government production.

- **Decide whether to "make or buy."** For example, decide whether to purchase teaching aids or rely on the community to produce them. Since messages are reinforced if several media are used, the decision may be which teaching aids (posters, flip charts, etc.) should be purchased and which ones should be made.
- **Select a supplier.** Reliable suppliers deliver products by their agreed-upon delivery date. A supplier who does not produce and deliver shoulder bags on time may impede the entire packing of shipments of Volunteer Health Sister kits.
- **Consider willingness to pay.** There may be insufficient funds allocated for purchasing items for Volunteer Health Sister kits, while the rural population is buying expensive, inappropriate syrups and tablets for common colds, diarrhea, and other illnesses. Perhaps patients would be willing to purchase paracetamol or ORS directly from the Volunteer who has them readily available in her home and can instruct them on their use.

Distribution is a complex and highly varied function. In some cases, deliveries of pharmaceuticals and medical supplies may be carried out by hiring private transportation. In other cases the governing body assumes the responsibility through its own transportation resources. The greatest difficulty is often getting supplies from a central warehouse all the way to the farthest health facility and Volunteer Health Sister.

- **Keep track of stocks.** Managers are frequently unaware of what supplies they have on hand or where they are; supplies needed in one region may gather dust in another because their presence is unknown or mechanisms for transferring stocks do not exist.
- **Plan how to transport supplies.** Disorganization or lack of transport in some areas or in certain seasons make transportation difficult, particularly in remote areas, resulting in slow delivery and increased costs unless deliveries are carefully planned.

Use of supplies is influenced by factors both inside and outside the Volunteer Health Sister Program.

- **Prepare and distribute supplies in a way that promotes effective patient use.** Treatment may be incomplete due to inadequate instruction or quantity dispensed. For example, a child with moderate

diarrhea may not be adequately rehydrated if the mother is only given one packet of ORS by the Volunteer.

- **Target high-risk families and individuals.** A Volunteer Health Sister who distributes all her soap indiscriminately will quickly exhaust her supply without effectively reaching the people who need it most. She should focus on those who have the greatest need for health education and services.

Selecting supply types and quantities

Selecting appropriate supplies

What items should be supplied to a VHS?

The appropriate array of supplies for community level workers is sometimes debated, especially for non-literate workers. The issues for a Volunteer Health Sister are whether she can effectively use the items she has in her kit and that as a "health worker" she is not viewed as a "doctor" who should prescribe tablets or give injections purchased from the bazaar.

The basic list of items for a Volunteer Health Sister kit is summarized in Exhibit 9.2. Other items can be added if a strong supervision and monitoring system is in place, if Volunteer Health Sisters have been well trained, and if resources are targeted for this purpose. A list of additional items to include in the kits in summarized in Exhibit 9.3. The quantities to be provided will depend on the number of families served, the frequency of resupply, and prevalence of the conditions addressed.

Exhibit 9.2

Basic Volunteer Health Sister Kit Items

Quantity per Initial Kit	Item
1 Set	Posters and/or flip charts (corresponding to the modules and prime health messages)
1	Liter Jug
2	Marker Pens (for marking liter measure on a household container)
25	Oral Rehydration Solution packets
25	Soap (miniature bars)
1	Shoulder Bag

Exhibit 9.3

Additional Kit Items

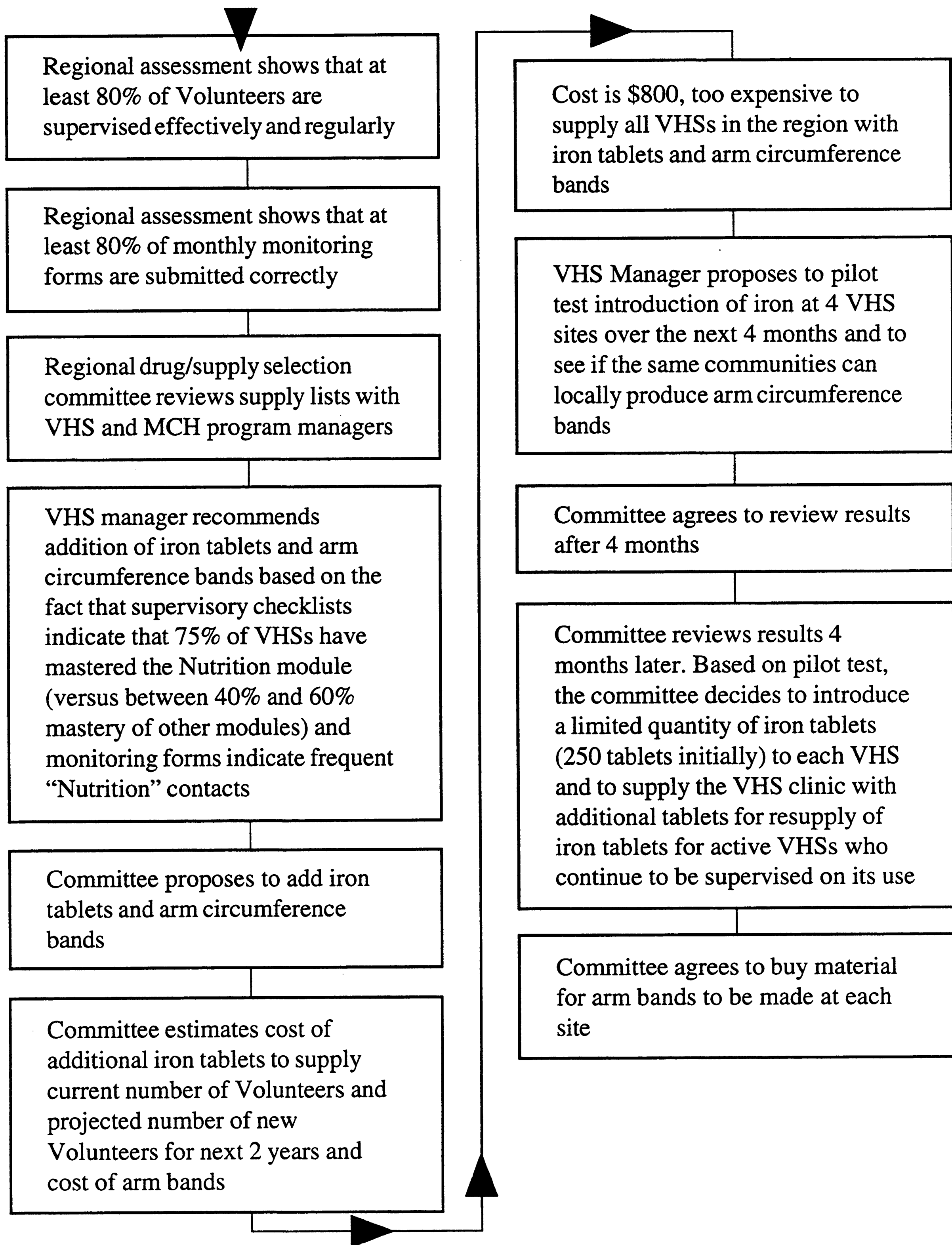
Arm circumference bands
Bactrum
Delivery packets (razor blade, soap, thread, etc.)
Iron tablets
Paracetamol
Vitamin A capsules
Doll with cord and placenta

Any decision to expand the list of supplies is best achieved by coordinating with a larger drug selection committee. A decision to include iron tablets or bactrum, for example, should not be initiated by a trainer at the facility. The trainer can recommend inclusion of these items, but should coordinate with the district or regional authorities to assure a standard policy as well as sufficient supplies. Ideally, such decisions should be made at the regional or national level by a drug/supply selection committee which reviews all supply lists, in coordination with those responsible for the Volunteer Health Sister Program. (The responsibility for determining supply needs will likely be the responsibility of the MCH department, since the Volunteer Health Sister Program is likely to be a key activity of a broader MCH effort.)

Exhibit 9.4 shows one process for introducing new items.

Exhibit 9.4

Flow Chart for Phasing the Introduction of Additional VHS Kit Items



Selecting appropriate quantities

How to determine appropriate quantities of supplies

There are 2 basic methods for estimating quantities of supplies needed for a Volunteer Health Sister Program:

- **Service-based Method**: Determine the number of health providers available to the program (Volunteer Health Sisters, trainers, and Supervisors) in order to estimate quantities.
- **Consumption-based Method**: Gather information from existing sources on previous supply needs for the program.

These methods are designed to separate needs from wants. The service-based method is the method to use when starting a Volunteer Health Sister Program. This approach incorporates the technical, financial, administrative, and cultural constraints in the plans. As information is generated from monitoring forms from various programs, the consumption-based method can be used to provide more accurate estimates.

Realistic estimates of supply needs can be based on information from vhs monthly monitoring forms and 6-month monitoring summary forms.

The consumption-based method alone may underestimate the real demand if people who needed soap or ORS were unable to get them because of shortages. Generally, a combination of the two methods is most useful, especially if program services are growing rapidly.

An example from the pilot Volunteer Health Sister Program (summarized in Exhibit 9.5) demonstrates the steps, and problems, involved in predicting supply requirements on a relatively small scale. In order to be prepared for supplying the pilot Volunteer Health Sister Program in 12 facilities in Afghanistan, estimates of kit needs were made 4 months prior to the workshop for introducing the pilot program. The technical assistance team assumed that, for the first 6 months of the program, a maximum of 11 kits would be required at each site (1 for the Trainer/Supervisor and 10 for the women undergoing training). Calculations were made for supplying 11 kits to each of 12 sites for 6 months.

Exhibit 9.5

Kit Supplies for 12 Sites

11 kits x 12 sites	x 1 Hygiene poster	=	132 Hygiene posters
	x 1 EPI poster	=	132 EPI posters
	x 1 CDD flip chart	=	132 CDD flip charts
	x 1 Safe Motherhood flip chart	=	132 S.M. flip charts
	x 1 liter jug/kit	=	132 jugs
	x 2 marker pens/kit	=	264 markers
	x 25 mini-soap bars/kit	=	3,300 soaps
	x 1 shoulder bag/kit	=	132 bags
	x 25 ORS packets/kit	=	3,300 packets
plus 500 packets/site for local resupply		=	3,000 packets

Procurement of kit items

Steps in procuring supplies

Although the actual purchase or obtaining of items will usually be undertaken by a purchasing or "procurement" department, managers directly responsible for the planning, implementation, and evaluation of the Volunteer Health Sister activities should be aware of the next steps in the procurement part of the logistics cycle. They are:

1. **Reconcile needs and funds.** All too frequently, initial estimates of needs exceed the amount which can be purchased with available funds. Maximizing the use of donated supplies or contributions by the community may reduce the gap between needs and funds. If the needs are greater than the funds available and no donations or local community contributions can be found, reduce the quantity or variety of supplies.

2. **Choose a procurement method.** Once the specific supply list and exact quantities are determined, decide whether items will be supplied by local community contributions, developed locally using purchased materials, purchased from a supplier, or donated by a donor. The method selected has a great influence on price, quality, packaging, and availability of the item in the community. In the example shown above, 3 procurement methods are outlined: purchase from a supplier (for iron tablets), community contribution (for producing arm circumference bands), and donation from a donor (for delivery packets). The type of procurement method selected has strong implications for price, quality, and product availability, especially when a large quantity of items is needed.

3. **Locate and select suppliers.** For items to be purchased from a supplier, you must decide which supplier will receive the business. Selection of medical supplies will likely be predetermined by the overall health service procurement system. However, if special posters to match the 7 core modules are going to be purchased, negotiations can be undertaken with several suppliers regarding types, price, quantities, and delivery schedules.

4. **Specify contract terms**. For items being purchased or obtained directly from a donor organization, formal statements of the supply terms should indicate the name of the item, the quantity, the packing specifications, quality standards, the delivery date, and possibly a penalty (for purchased items) for the failure of the supplier to meet its obligations. For example, if the size of soap is not clearly specified as "small, 30 gm.", the receipt of larger bars of soap can quadruple the weight of the VHS kit, resulting in packaging problems and unexpectedly high transport costs.

5. **Monitor the order.** Once an order for VHS kit items is placed with a supplier or donor organization, its progress should be monitored to avoid delays in receipt. Monitoring an order is especially important when items in a kit need to be packaged. For example, if an order for razor blades is delayed, delivery packets cannot be prepared.

6. **Receive and check supplies.** Once items arrive they should be stored in a secure area and checked to confirm that the supplier has fulfilled its obligations.

7. **Make payment.** Payment for shipments may be made in an advance or when the items have been received (the latter being standard practice). If payment is made in advance, a percentage of the price can be withheld until delivery.

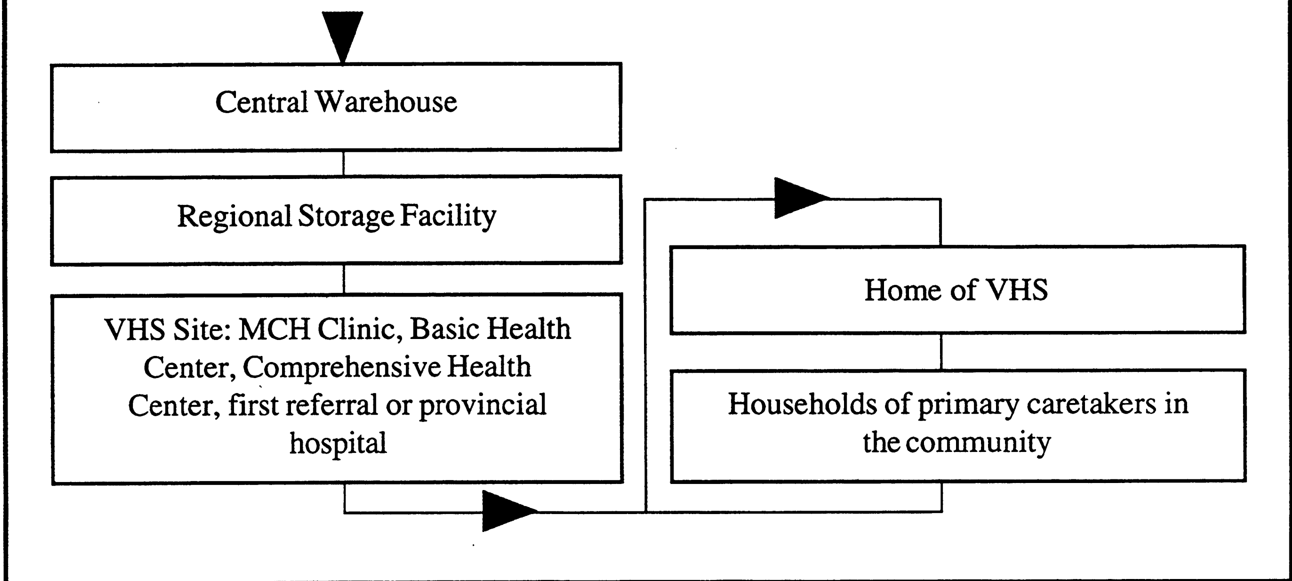
Distribution of supplies

Activities to distribute supplies

Once procurement is completed, the next activities include storing and packing supplies and moving them safely and expeditiously to their final destinations in the health care system. Whether a distribution system already exists or one needs to be developed, systematic planning is essential. The key elements are the storage points, modes of transportation, information system, and handling procedures. In Afghanistan, distribution begins at a central warehouse where supplies are distributed to regional supply depots, based on information on the requisite number and location of facilities requiring specific types of kits.

Exhibit 9.6

Flow Chart of VHS Supply Distribution



The primary activities involved in distribution of Volunteer Health Sister supplies include the following:

1. **Inventory control.** A record system is essential for coordinating the flow of supplies to the field. It should be clear at all times how many VHS items are in stock in the central warehouse, how many are in the regional supply depot, and when shipments to facilities with Volunteer Health Sister programs were made. Without knowing the available stock, it is not possible to efficiently place future orders as shipments to the field sites are made. The overall system should be detailed enough to provide an "audit trail" for government officials, donor agencies, or supply managers to trace the flow of funds and supplies through the system.

2. **Storage.** VHS kits should be stored where they can be guarded against theft and protected from water, dampness, and extreme temperatures. For government programs, VHS kits will initially be stored in a central-level warehouse and will then be shipped to regional-level storage facilities (generally smaller buildings or a series of rooms). When kits are distributed to the clinic or to the VHS's home, they should continue to be stored safely and carefully, on a shelf or in a metal box.

3. **Packing of kits.** Ideally, Volunteer Health Sister kits should be packed at the central warehouse to assure that all items are included. Additional cartons of dispensable items such as soap, ORS, and tablets can be packed with the initial kits for intermediate resupply to the Health Sisters.

4. **Requisition of initial and resupply items.** Forms and procedures for requisitioning kits from storage facilities should be part of the information system. Forms and procedures should clarify the number of initial VHS kits and/or the number and type of resupply items (dispensable items plus replacement for durable items which have been worn out or lost). There should be a procedure for ordering and distributing kits from the central level to the regional level and from the regional level to the facility. The facility should keep records of kits and resupply items received and distributed to the Volunteers.

5. **Delivery.** Within Afghanistan, supplies may be transported by air, by truck, or even on horseback. Punctual and economic transport of supplies requires that those responsible for distribution select modes of transportation carefully and schedule deliveries realistically. Planning is critical given the high cost of transport (reportedly up to 20% of total costs), seasonal variations in access routes, security along specific supply lines, and other local factors.

6. **Dispensing.** The distribution process achieves its ultimate purpose when the supplies reach the facility for distribution to the Volunteers and women in the village.

7. **Consumption reporting.** The closing link in the distribution chain is the flow of consumption information back up the distribution system. If no other reporting system is in place, the six-Month Summary monitoring report serves as a useful report for determining consumption (see Chapter 10, "Monitoring and Evaluation"). For a public program, 6-Month Summary Reports should be collected by the regional health administrations, where the information on supply requirements can be summarized for the region. This consumption information should be collected at the central level from all regions and used for planning future supplies.

Use of supplies

How to promote appropriate use of supplies

When all of the previous steps of the logistics cycle have been undertaken, the next question is, "How does one assure that the mother, or primary caretaker in the home, uses the VHS supplies and health information appropriately?"

The proper use of vhs health information and supplies is essential to improve health. To promote appropriate use of supplies:

1. Train effectively
2. Understand the local culture
3. Package/label supplies clearly

The use of the supplies depends on the quality of the training at all levels: training of trainers, Supervisors, Volunteer Health Sisters, and mothers. This cascade of training must be accurate and complete in order for women in the community to "use" the health education to improve their well-being and to use ORS or other medications approved for the program.

However, use of the medical supplies and health education training materials is also affected by issues such as culture and packaging/labelling. Cultural restraints can block a patient's understanding of health messages, as illustrated in Exhibit 9.7.

Exhibit 9.7

Example: Understanding Local Culture and Beliefs

A VHS trainer began her session on nutrition by asking mothers what type of foods they feed their babies when they start to introduce foods. The trainer noted that the mothers were not mentioning foods with protein, so she explained that foods such as eggs will help a child grow.

One of the mothers smiled when the trainer mentioned that infants should be given mashed egg. The mother advised the trainer, "Eggs cause deafness in babies." The VHS trainer asked the mother why eggs cause deafness. The mother said "it is common knowledge." The other women attending the discussion nodded their heads in agreement.

The trainer asked, "But have you ever seen a child who was deaf from eating eggs?" The mother replied, "No, because we never feed eggs to our babies." The trainer explained that she herself had fed her own children eggs around age 4 months. She discussed with the mothers different types of food to introduce to a 4 to 6 months old.

At the next session, the trainer brought her sister-in-law with her, and her 6 month old son. She asked her sister-in-law how baby Ahmed had grown so strong. Her sister-in-law explained that she breast fed him and gave him good foods. The trainer showed the mothers a sample of good weaning foods, and asked her sister-in-law if Ahmed liked eggs. "Of course, he likes them very much," and she gave him a boiled egg which she had brought to the discussion. The sister-in-law explained, "we have chickens, so we always have a good supply of eggs, but kidgiri (dahl with rice) and shorwar (bread soaked in meat-based soup) also help my son grow strong. I also give him vegetables and fruits, to make sure he eats different kinds of foods with lots of vitamins."

Trainers should try to understand deep-rooted beliefs and attitudes when holding health education discussions in order to change unhealthy behaviors. A trainer should try to encourage healthy behaviors and discourage unhealthy behaviors. Traditional beliefs which do not affect health should be respected, and the trainer does not need to change them. A trainer who respects the local culture can often convince a mother continue feeding her sick child. A trainer who does not respect local traditions and beliefs will be less likely to persuade a mother to stop giving needless syrups and tablets to a child with a common cold.

The effective use of Volunteer supplies depends on how the items are packaged and labeled. For example, a major problem with the use of Oral Rehydration Salts in many rural areas is the unavailability of standard one liter containers, which results in over-dosage or under-dosage of the sodium and potassium salts. By packing a liter jug and markers with each kit, the Volunteer can label a liter measure on one of the household containers in each home she visits. This helps to ensure that the correct proportion of salts and water are mixed together. Also, even though illiteracy rates are high in the rural areas, patients can often find someone in the village who can read Dari or Pushtu instructions written on the packets, or symbols can be used.

Exercises

Exercise 1

Estimating VHS Kit Needs

Calculation Exercise

Directions: Divide class into groups of 3 or 4, or have each person work individually. Have 2 groups or individuals present their estimates and calculations to entire class.

Situation: You are starting a new VHS program and need to prepare an estimate of supply needs. You plan to start the program in 10 sites. Because the supply depot is very accessible to the sites, you have decided to issue enough initial kits to each VHS site for 7 VHSs during the first 6 months. The Procurement Department will request orders again after 3 months. At that time, you plan to use data on the number of VHSs trained to date to more accurately estimate needs for the second half of the year. You have already selected the following items to be included in each kit:

- 1 Hygiene poster

Continued

Continued

- 1 EPI poster
- 1 CDD flip chart
- 1 Safe Motherhood flip chart
- 1 liter jug
- 5 mid-upper arm circumference bands
- 30 ORS packets
- 30 bars of soap
- 1 shoulder bag

Determine how many of each of the above items you will need to order for the first 6 months. Include a buffer stock (additional reserve) of ORS and soap to issue to each site.

Time: 45 minutes (25 minutes for calculations, 20 minutes for presentations)

Materials: None

EXERCISE 2

PROCUREMENT OF SUPPLIES

QUESTION AND ANSWER/DISCUSSION

Directions: After calculating the kit needs, you have discovered that the cost of the items is more than the funds available. The cost of the supplies is 20% more than your budget.

1. How can you reconcile the program's estimated supply needs and the funds available?
2. One alternative you have selected is to search for less expensive items from other suppliers. You have decided to obtain 3 quotes on each of the items. You discover that one supplier is able to supply liter jugs for one fourth the rate of your original estimate. However, the supplier's reliability is questionable. What steps should you take with this supplier to assure that you receive the items on time?

Time: 30 minutes

Materials: None

Exercise 3

Distribution of Supplies

Problem-Solving

Directions: In a large group, read the following situation. List the steps that the assessment team should take to locate the bottleneck in the logistics system (e.g., find out from the regional health depot if the supplies are in the warehouse). After the list is complete, assign a number to each step to reflect the order in which the assessment team should proceed.

Situation: An assessment of the VHS program at 10 sites reveals that in only 4 sites do the Volunteer Health Sisters have stocks of ORS in their homes for distribution to families. The Trainer/Supervisors at the 6 sites where VHSs do not have supplies complain that there has been a delay of several months in receiving their clinic supplies, including the VHS kits. The assessment team is from the MCH Department of the Ministry of Public Health.

Time: 25 minutes

Materials: Blackboard and chalk, or flipchart and markers

Exercise 4

Use of Supplies

Case Study

Directions: In a large group, read the following case study and answer the questions below.

Case study Dr. Gul Mohammed is a Trainer/Supervisor. He is surprised that the Volunteer Health Sisters are requesting so many packets of ORS. Initially, he met their demand for packets, but now the clinic's ORS supply is nearly exhausted.

Dr. Gul Mohammed asks Fahima, the clinic's nurse assistant and VHS Supervisor, to find out why the VHSs are using so much ORS. There has been no increase in diarrheal cases at the health clinic and, in fact, since the autumn weather has set in he expects a decrease in diarrheal cases.

Fahima interviews all of the Volunteers in the area and learns that they are distributing packets indiscriminately to all families with whom they come in contact. They say that Dr. Gul Mohammed told them to demonstrate preparation of ORS to the families and to give the primary caretakers packets to practice mixing the solution. They also give additional packets to each family in case the children get sick.

Continued

Continued

1. How can Dr. Gul Mohammed target the distribution of ORS so that families who need it get it?
2. How can he communicate his strategy to the Volunteers?
3. How can he monitor the use of ORS to see that it is being used properly by the families that need it?

Time: 25 minutes

Materials: Blackboard and chalk, or flipchart and markers

CHAPTER 10

Monitoring and Evaluation

Why evaluate?

Assessing whether the program is meeting its objectives

Evaluation of the Volunteer Health Sister Program should be carried out to help MCH and VHS Program managers and field staff assess whether the program is actually accomplishing its objectives, or whether some type of mid-course correction is needed to accommodate changes in the environment or unforeseen problems. This chapter has been written primarily for the Program Manager, but it is also important for Trainer/Supervisors to understand how tools such as supervisory review forms and monitoring forms can be used to judge whether the VHS Program is improving the health of the population. Considerable effort should be given to developing a monitoring and evaluation system because accurate, relevant, and timely information is essential for an effective program.





A failure to evaluate program impact may result in:

- Poor use of resources on ineffective activities
- Potential loss of life if health interventions which are ineffective or inaccurate continue to be carried out
- Poor morale among health providers due to no realizable effect of the health services

Who is evaluation for?

Different groups have different expectations about evaluation

Sometimes evaluation is carried out because the Ministry of Public Health or a donor has asked for it, perhaps because they need more information to see whether past policies and activities have been successful. Sometimes a funding agency asks for an evaluation for similar reasons, and because it feels a responsibility to assure donors that their money has been well spent.

Community level program staff may see the main purpose of evaluation as being a practical one. They want to know what their program has achieved, whether their efforts are effective, and whether resources are being used efficiently to achieve the objectives of the program.

Sometimes a university or research organization helps those organizing the evaluation gain more knowledge about research methods. They may publish books and articles or use the evaluation for special studies on community programs.

When an evaluation takes place, the people who participate may well have very different objectives or motives for being involved; they may also have different expectations or hopes. If the objectives of the program are not clear, or if the people involved start off with different ideas about why they are there, what they expect, and where they want the program to go, confusion will result. Before an evaluation begins, it is essential to know what expectations people have and what the objectives of the program are.

External or internal evaluator: who can give the clearest picture?

Objective versus subjective evaluation

An **external evaluator** is a person who is able to take a fresh look at a program because he or she is not involved personally, and so has nothing personal to gain or lose from the evaluation. An external evaluator will not be influenced too much by program staff or funders, personal friendships, or dislikes. Therefore, he or she is said to be less likely to be "biased" and more able to be "objective".

An **internal evaluator** is a person "inside" the program or one who knows the program very well. He or she already knows how the program functions, and its objectives, problems, strengths, and weaknesses.

However, an internal evaluator who knows the program may find it difficult to produce an evaluation report that is not biased. Internal evaluators may be influenced by feelings, likes, dislikes, or even their own ambitions. They may be too "subjective." Being subjective is not a negative thing in itself, but in evaluation a subjective attitude can destroy clear thinking and honest reporting. The advantages and disadvantages become clear if the two types of evaluation are compared, as shown in Exhibit 10.1.

Exhibit 10.1

Advantages and Disadvantages of External and Internal Evaluations

External	Internal
Can take a fresh look at the program	Knows the program only too well
Not personally involved, so can be more objective	Finds it hardest to be objective
Is not a part of the normal power and authority structure	Is part of the power and authority structure
Gains nothing from the program, but may gain prestige from the evaluation	May be motivated by hopes of personal gain.
Trained in evaluation methods.	May not be specially trained in evaluation methods
Regarded as an "expert" by the program	Has no more (or little more) training than others in the program.
An "outsider" who may not understand the program or the people involved	Is familiar with and understands the program, and can interpret personal behavior and attitudes
May cause anxiety because program staff are not sure of his or her motives	Known to the program, so poses no threat of anxiety or disruption
	Final recommendations may appear less threatening

Evaluation looks at quantity and quality

You can evaluate attitudes and behaviors as well as numbers of health products

Every evaluation deals to some extent with things that can be counted and/or measured, such as the number of health education contacts made, the amount of delivery packets available or required, the financial cost of running the program, or the extent of an area being covered. These numbers, amounts, and quantities are often described as the *quantitative* aspects of evaluation.

However, programs do not only consist of factors that can be counted and/or measured. They also consist of factors that are hard to count or measure, but which influence program success or failure in important ways. These include people's behavior, abilities, qualities, attitudes, values and motivations, and how people relate to one another and to the program. These are described as the *qualitative* aspects of evaluation because they relate to the quality of what is being evaluated. Such factors are important because they help explain why a program in a particular place proceeds in a particular way, and why it has particular strengths and weaknesses, problems and solutions, and expected and unexpected outcomes.

Definitions of monitoring and evaluation

Monitoring is a type of evaluation

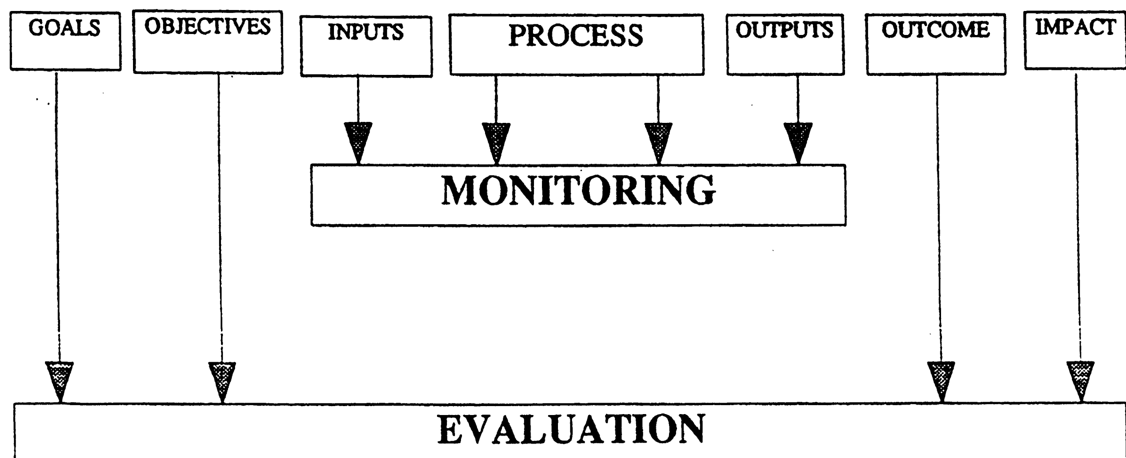
In the context of the Volunteer Health Sister outreach program, it is useful to define monitoring and to define evaluation, both of which should look at quantity and quality:

Monitoring: The systematic and continuous following of activities (in the form of inputs, process, and outputs) to ensure that they are proceeding according to plan

Evaluation: Measuring the effect of the program to see if it meets its goal and objectives, and ultimately, if it has an impact on the health of the population.

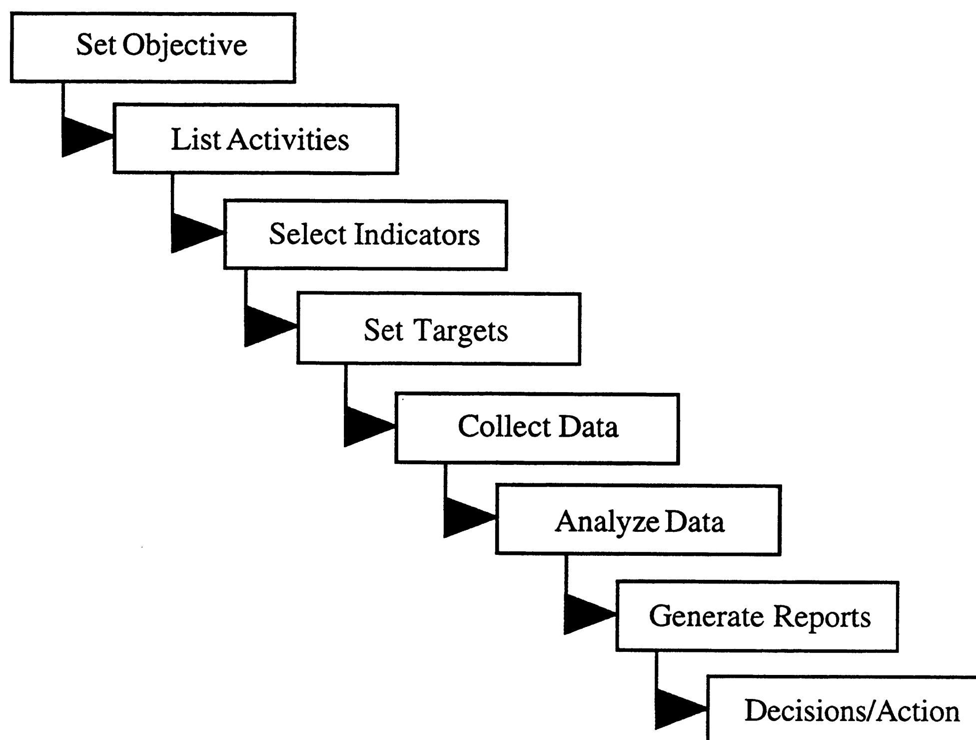
The figure below in Exhibit 10.2 graphically shows how monitoring is part of evaluation. Evaluation begins with setting the goal and objectives. Monitoring systematically tracks the activities which have been organized to meet the objectives, such as how many Trainer/Supervisors there are (inputs), how well they are training the VHSs (process), and how many trained VHSs are actively working in the community (outputs). Evaluation looks at whether the VHS services have resulted in improved health knowledge of mothers (outcome) and significant changes in mothers' health practices among a sizeable portion of the population to improve the health status of the community (impact).

Exhibit 10.2



Developing the monitoring and evaluation system: The eight step process

The design of a monitoring and evaluation system is an 8-step process summarized by the flow chart below, in Exhibit 10.3 (LeSar, J. et al., 1987).



Set objectives

The design of a monitoring and evaluation system begins with setting objectives

The process starts with setting objectives and continues one step at a time until the system is completed with decisions and actions being taken based on the information generated. Evaluation is a way of looking at program activities, human resources, materials resources, information, facts, and figures in order to monitor progress and effectiveness, consider costs and efficiency, show where changes are needed, and help plan more effectively for the future.

Setting objectives is important because you must first know where you are going before you decide how to measure your progress along the way. Evaluation can be compared to taking a bus journey along an unknown road. While people in the bus can see through the glass windows they are pleased because they can see the progress being made. Signs along the way which tell them where they are and how much farther it is to their destination are a way of monitoring their progress. When rain forces them to put wooden shutters over the windows it is no longer possible to assess their progress. Although they

know they are moving forward it is not possible to tell along which road, how fast, or whether they are nearing the destination. Monitoring and evaluation are similar to looking to see where and how fast one is moving, and then estimating when the destination will be reached.



List activities

Activities are required to meet your objectives

As mentioned in Chapter 8, "Management of the Volunteer Health Sister Program," you need to list the activities in your work plan which are required to meet your objectives. In order to train VHSs, you must first carry out the following activities:

1. Select VHS sites
2. Train the Trainer/Supervisors
3. Prepare supplies for the VHSs
4. Introduce the program to the communities where the program will be implemented
5. Recruit and select VHSs
6. Train the VHSs

Select indicators

An indicator is a marker

An indicator is a marker. It can be compared to a road sign that shows if one is on the right road, how far one has travelled, and how far remains to reach the destination (or objective). Indicators show progress toward the established objectives and help to measure change. Many indicators consist of measurements and are expressed in numbers, such as:

- **a number**, such as the number of Volunteer Health Sisters trained in one year

- **a percentage**, such as 75% of trainers received sufficient supplies to conduct their program for one year without stock-outs
- **a rate**, such as the infant mortality rate, which is the proportion of children under 1 year of age who die in a year, in relation to live births in that same year, usually expressed as deaths per 1000 live births
- **a ratio**, such as the number of ORS packets distributed in relation to the number of Volunteer Health Sisters in a specific area (for example, 500 packets to every 15 Health Sisters would be a ratio of 500:15 or 100:3)

Exhibit 10.4 shows a recommended list of indicators for measuring program progress. The first 4 are called *process* indicators because they focus on the process of implementation. Indicators 5 through 7 are *impact* indicators because they focus on the impact of the program in improving knowledge and skills. Note that indicators 5 through 7 could be applied to any module of the VHS curriculum. For example, to develop indicators for the module about common cold and pneumonia, you could monitor "the percentage of Trainer/Supervisors who can correctly identify the danger signs of pneumonia," or the "percentage of VHSs who can correctly identify the danger signs of pneumonia" and so on.

Exhibit 10.4

Recommended Indicators

1. The number of VHSs trained per year
2. The number of VHS health education contacts per VHS site per year
3. The number of VHS encounters for treating diarrhea per year per site
4. The number of referrals made by VHSs per year per site
5. The percentage of Trainer/Supervisors who can correctly demonstrate preparation and administration of ORS
6. The percentage of VHSs who can correctly demonstrate preparation and administration of ORS
7. The percentage of primary caretakers, served by a VHS, who can correctly demonstrate preparation and administration of ORS

At a minimum, information should be collected about the above indicators before or during the start of the program (baseline information). Thereafter, information can be collected on a routine basis through the VHS Program Assessment Form and the Monthly Monitoring Forms (see below). Special interviews can be carried out with mothers to see how many are able to prepare ORS. Other indicators for each module can be selected, but the indicators selected should correspond to the objectives of the VHS Program.

Set targets

Set realistic targets

Setting targets is one of the most important but least often performed steps in program planning. Targets are like interim destinations on the way to a final destination. For example, consider that you want to depart from Jalalabad on Sunday morning and travel to your clinic in Panshir, your final destination, by Wednesday. You set a target to reach Kabul by Sunday evening, and to reach the border of Kapisa Province by Tuesday, and to reach your clinic in Panshir valley by Wednesday. The objective has been broken down into smaller units and specific periods of time. Similarly, the VHS Program should have targets which are set along the way to the final objective. If you want to train 800 Volunteers throughout the country over the next 2 years, you can break that objective into "train 300 Volunteers during this year, and 500 next year" to reach a destination or objective of 800 Volunteers.

Many managers find it difficult to set realistic targets because they need good baseline data on which to base their targets. A manager who does not have any information on the number of women who begin supplementary feeding for their infant at 4 to 6 months of age cannot easily set a realistic target. If he knows that only 14% of mothers begin supplementary feeding at the correct time, then he can say, "The target for the VHS Program over the next 2 years is to improve weaning practices so that 25% of mothers in the catchment area begin supplementary feeding by the time their child is 6 months old." Data from other provinces or countries can be used as rough baseline information if there is no such information available for your particular area. It is very important to select targets for which you can actually collect data.

Set targets which you can readily measure.

Collect data

Using tools for data collection

You need to gather information about how far the program has progressed toward reaching its targets (interim and final destinations). You need tools to collect this data.

The Monthly Monitoring Form

Monitoring at the community level

During the pilot Volunteer Health Sister Program, the monitoring tool which appears in Exhibit 10.5 on the next page was developed to:

- Monitor the productivity of the Volunteer Health Sisters
- Keep track of the number and type of contacts between each Health Sister and individuals to whom she provides a service
- Monitor the distribution of soap and ORS supplies

The use of symbols for non-literate health workers

The Monthly Monitoring Form has been designed so that the Volunteer Health Sister can, by herself, record her activities on a monthly basis. Its use of symbols makes it easy for a non-literate worker to mark each time she makes a health education contact, dispenses a product, or refers a patient. It also uses symbols to differentiate between male and female recipients of a service and to indicate whether the recipient was under age 5 or not.

Characteristics of a good monitoring tool for non-literate health workers:

1. Uses symbols instead of words
2. Has a simple format
3. Requires minimal time to complete
4. Costs little to produce and use
5. Easy to teach and easy to use

The instructions for completing the Monthly Monitoring Form are quite simple, but it is important to carefully observe that the Volunteer Health Sister can complete it correctly.

Every time a Volunteer Health Sister has a "health encounter" with a person, she should mark a "1" in the box beneath the appropriate health topic and across from the category of recipient (female under age 5, female over age 5, male under age 5, or male over age 5). A health encounter is defined as a health education contact, treatment contact, or referral. It is important to stress to the VHS that she should mark a "1" for each individual for whom she provides one of these services rather than for a group or family. Exhibits 10.6 and 10.7 provide examples of how to complete the monthly monitoring form.

Exhibit 10.5

VHS Monthly Monitoring Form

for period ________ to ________

	Products		Health Education							Referrals				
	Soap	ORS	Hygiene and Sanitation	Control of Diarrheal Disease	Immu-nization	Nutrition	Common Cold and Pneumonia	Safe Mother-hood	Injury Prevention and First Aid	Female Health Worker	Basic Health Worker	(BHC or CHC) Clinic	MCH Clinic	Hospital
<5														
<5														
Total														

VHS's name: ____________________

Trainer/Supervisor's name: ____________________

Local Supervisor's name: ____________________

Facility #: ____________________

Village: ____________________

District: ____________________

Province: ____________________

Exhibit 10.6

Instructions for Completing the Monitoring Form: Sample Case #1

Volunteer Health Sister Karima gave a health education talk about personal hygiene and a bar of soap to a mother. Karima should mark her monitoring tool by:

- pointing to the row which starts with a picture of a lady (females over age 5)
- pointing to the column which has a picture of hand washing (representing the Personal Hygiene and Environmental Sanitation module)
- marking a "1" in the box where this row and column intersect to indicate the health education contact

She should again mark the monitoring tool by:

- pointing again to the row which starts with a picture of a lady
- pointing to the column with the picture of soap (which represents soap distribution)
- marking a "1" in the box where this row and column intersect to indicate the disbursement of 1 soap to the lady

Exhibit 10.7

Instructions for completing the Monitoring Form: Sample Case #2

Volunteer Health Sister Fahima held a discussion about Safe Motherhood with a group of 5 women. One of the women, who is pregnant, mentioned that she had been very tired. Fahima notices that the pregnant woman was also very pale, so she encourages the woman to go to the nearest Basic Health Center to be treated for anemia. Fahima offered to accompany the woman later that day.

Fahima should mark on her monitoring tool that she had Safe Motherhood health education contacts with 5 women by:

- pointing to the row which starts with a picture of a lady
- pointing to the column which starts with the picture of a pregnant woman (representing the Safe Motherhood module)
- marking "1" in the box where this row and column intersect to indicate 5 health education contacts about Safe Motherhood

She should again mark the monitoring tool by:

- pointing again to the row which starts with a picture of a lady
- pointing to the column with the picture of people coming to a clinic
- marking a "1" in the box where this row and column intersect to indicate a clinic referral

VHS Program Assessment Form

Monitoring at the national or regional level

A sample "VHS Program Assessment Form" in Appendix A is an evaluation tool which national or regional level supervisors can use to monitor the programs at individual sites.

Use of other evaluation tools

Many tools can involve participants in their evalaution

In addition to the monitoring and assessment tools which have been specifically designed for evaluation of the Volunteer Health Sister Program, existing knowledge and records can also be used. One example would be a review of clinic records to see which cases have been referred by a Health Sister.

The following tools can also provide valuable information for evaluation:

- Photographs
- Maps of the VHS Program catchment area
- Observations of Volunteer Health Sisters, their supervisors, and Trainer/Supervisors
- Information from meetings of the elders or shura
- Interviews (structured or unstructured) with recipients about their perceptions of the program, and their health knowledge and practices
- Supervisory checklists
- Profiles (brief descriptions of characteristics) of the Volunteer Health Sisters
- Session evaluations (pre- and post-testing) of Volunteer Health Sisters
- Workshop evaluations (pre- and post-testing) of Trainer/Supervisors
- Intermittent, structured surveys of the Trainer/Supervisors, Volunteer Health Sisters, and the community to compare changes over time

Many of these tools also provide an opportunity to involve participants in their evaluation.

Observation data may have more depth than survey data.

Qualitative information about the community's expectations of and response to the program is important. Qualitative information can be gleaned from discussions or interviews with individuals or groups of villagers or by using a more structured format like a questionnaire.

You can develop a questionnaire to obtain specific information from any particular group. A questionnaire is a group of written or printed questions used to gather information from respondents. Questions can either be:

Open-ended: the respondent answers the questions in his or her own words and at whatever length he or she chooses

Fixed-choice or fixed-response: the respondent is asked to choose one or more answers from those provided, one of which should usually be a "don't know" answer

People can answer questionnaires either by writing the answers on the questionnaires themselves in the spaces provided or by answering the questions and having the interviewer write the response. The level of literacy will influence which method should be used.

Exhibit 10.8

Steps for Developing an Effective Questionnaire

1. Decide exactly what you need to find out, then write out the question.
2. Keep questions short and clear. Underline the main words or phrases.
3. Use simple and clear language.
4. Be specific. Avoid words which are vague, like "generally" or "rarely". You can be specific by saying things like "more than 3 times per week" or "less than once a day".
5. Decide how the questionnaire will be completed. Will the respondents answer it themselves, or the interviewer, or will it be a group activity?
6. Choose only important questions and arrange them in a way that the easiest ones or more general ones are first. Be careful that earlier questions do not influence the answers to later questions.
7. Decide how the answers will be recorded and analyzed. The answers can be coded, which means that later it is easier to summarize and analyze them.
8. Leave space for recording all answers.
9. Do not leave any questions blank because that will create confusion during the analysis. You can write in a "no response", "no opinion", or "don't know".
10. Give exact instructions to the interviewer or respondent on how to record answers.
11. Mark each page of the questionnaire using a heading and/or a number in case the pages become separated.
12. Mark each questionnaire clearly, giving each respondent, household, or group an identifying number or letter.
13. Plan how the questionnaire will be introduced to the respondents. Train interviewers to explain, in a consistent manner, the purpose of collecting information and the ways in which it will be used.
14. Field test the questionnaire to see how well it works and make modifications as necessary before it is used on a wide scale.
15. Make sure that interviewers arrange an acceptable time to conduct the interview and thank the respondents for answering questions at the completion of the interview.

How to use a questionnaire

You can use a questionnaire to interview people individually or in groups. An interview is a face-to-face meeting between two or more people at which an interviewer asks questions to obtain information from one or more respondents. An interviewer can also observe the environment and respondent to draw conclusions for the survey. The interview techniques outlined in Chapter 3, "The Community", are applicable to most survey interviewing.

In an individual interview, the interviewer asks questions of only one person. Group interviews involve several respondents. A group interview is often carried out in the form of a focus group, which is a planned and guided discussion led by an interviewer who probes to find out the information which is sought. It is enlightening because the group participants may build on each other's thoughts or have differing opinions.

An important point of interviewing is to ask a question in an objective manner. Asking leading questions, such as "Don't you agree that...." can influence the response. When introducing the purpose of the interview, you should try to create a setting where the respondent can honestly answer. Otherwise, people may give the answers they think the interviewer wants to hear.

The way in which the community sees the purpose of the survey will influence the way they answer questions. It is useful to clear up any issues with the community leaders prior to conducting a survey.

Questionnaires which were developed for collecting baseline data for the pilot VHS Program appear in the appendices. The questionnaire in Appendix C was administered to community leaders. The questionnaire in Appendix D was used to gather information from women (generally primary caretakers) in families which had been visited by a VHS, in families which were neighbors of those visited by a VHS, and in a distant part of the community which had not been influenced by a VHS.

Interviewers should be trained prior to conducting a survey in order to understand how the survey is organized and to learn and practice interviewing techniques. Interviewers should have instructions about how to complete the questionnaires, especially for surveys involving more than one or two interviewers. A training agenda which was used in the VHS Pilot Program to prepare interviewers for conducting a baseline survey is shown in Appendix E along with general instructions on how to complete a questionnaire, which appears in Appendix F.

Analyze data

Analyzing data for practical decision-making purposes

In order for the information collected to be useful, it must be analyzed. Trainer/Supervisors and Program Managers should use the monitoring data in a very practical way to order appropriate quantities and types of VHS supplies,

to estimate the numbers of VHSs and local supervisors needed, to determine the approximate amount of time VHSs spend on their volunteer responsibilities, and ultimately to develop budgets.

The 6-Month Summary Form

The value of the 6-Month Summary Form

The 6-Month Summary form in Exhibit 10.9 on the next page should be used by the Trainer/Supervisor to summarize the information from all Volunteer Health Sister Monthly Monitoring Forms. The summary form has the same 3 purposes as the monthly forms, but it allows the Trainer/Supervisor to more easily analyze the progress of his program by having aggregated information.

For example, at each site you can summarize the number of health education contacts made by all VHSs at the site during the last 6 months, and then combine it with information 6 months later to have the number of health education contacts made (by module or in total) per year. The summary form is useful for estimating annual supply requirements. Supply information should be channeled to the regional and central levels for determining broad scale needs.

Analyzing data from other sources

How can other data be used?

Information from VHS supervisory review forms, program assessment forms, tests given during training of trainers workshops, focus groups, and other sources should be summarized and analyzed so that the results can be given in terms of the indicators.

For example, the information from pretests and post-tests at workshops or from VHS Program Assessment forms from each VHS site can be summarized to indicate the percentage of all Trainer/Supervisors who can correctly demonstrate preparation and administration of ORS. Information from the Supervisory Review Forms can be summarized for each site, for each region, and nationwide to determine the percentage of VHSs who can correctly demonstrate preparation and administration of ORS.

Analysis of clinic register books, or "greenbooks" as they are sometimes called, can tell whether there has been an increase in the number of children being brought to the clinic for vaccinations, and the percentage increase over time. Maps can be reviewed to see how the coverage area of the program has expanded.

Analysis can be done either by hand or by computer, depending on the size and purpose of the survey. An analysis can be a simple tally sheet of results, such as the one in Exhibit 10.10.

Exhibit 10.9

6-Month Summary Form

VHS Service Outputs

Number of people provided service between ________ and ________ (dates)

	Products		Health Education							Referrals				
	Soap	ORS	Hygiene/Sanitation	Control of Diarrheal Disease	Immunization	Nutrition	Common Cold and Pneumonia	Safe Motherhood	Injury Prevention & First Aid	Female Health Worker	Basic Health Worker	BHC/CHC	MCH Clinic	Hospital
Women/Girls over 5														
Men/Boys over 5														
Subtotal Persons over 5														
Girls < 5														
Boys < 5														
Subtotal Children < 5														
Total per category														

To determine total amount of ORS distributed, multiply # of ORS packets X 3 = ______

Comments:

Facility #: ____________
Village/Town: ____________
District: ____________
Province: ____________

Signature: ____________

Exhibit 10.10

Sample Analysis Tally Sheet

Number of Volunteer Health Sisters Recruited, Trained, and Active at Each Program Site

Site	**Recruited**	**Trained**	**Active** (at least 2 encounters per month)
#1	卌 卌 卌	卌 卌 ||||	卌 卌 |||
#2	卌 卌 卌 卌 卌	卌 卌 卌 卌 ||	卌 卌 卌 卌 |
#3	卌 卌 卌 卌 卌 卌 |||	卌 卌 卌 卌 卌	卌 卌 卌 卌 |
#4	卌 卌 卌 ||||	卌 卌 卌 ||||	卌 卌 卌 ||||
#5	卌 卌 卌 卌 卌 卌 卌	卌 卌 卌 卌 卌 卌 |||	卌 卌 卌 卌 卌 卌
#6	卌 卌 卌 卌 卌 卌 卌 卌	卌 卌 卌 卌 卌 卌 卌 |	卌 卌 卌 卌 卌 卌 ||||
#7	卌 卌 卌 |||	卌 卌 ||||	卌 卌 ||||

Tally sheets can be summarized into summary sheets and presented on paper or on a chalkboard. A sample summary sheet follows in Exhibit 10.11.

Exhibit 10.11

Sample Summary Sheet

Number of Volunteer Health Sisters Recruited, Trained, and Active at Each Program Site

Site	**Recruited**	**Trained**	**Active** (at least 2 encounters per month)
#1	15	14	13
#2	25	22	21
#3	33	25	21
#4	19	19	19
#5	35	33	30
#6	40	36	34
#7	18	14	14

Computers can generate the same type of information, and much faster than analysis by hand when you are conducting large surveys.

Use monitoring information to make decisions on an ongoing basis.

Generate reports

Evaluation results should to show the link between the program's actual progress and its original objectives. Evaluation results should be analyzed and reported to show:

Summarize evaluation results into a report

- what the program has been trying to do
- what actually happened
- where there are differences between program plans and what happened
- the reasons for these differences
- what needs to be done about them

Results should be summarized into a written report which can be submitted to various audiences. Sometimes you will need to use only part of an evaluation report, for example in the form of a summary sheet for training purposes. A sample outline of an evaluation report follows in Exhibit 10.12.

Exhibit 10.12

Sample Outline of Evaluation Report

Front Cover: Title, name, and location of program; names of those who conducted the evaluation; names of those with whom the program is linked, such as ministries and agencies; date the report was completed.

Summary: A 1 to 2 page overview of the report is useful for busy readers.

List of Contents: A list of contents in a clear, logical order will help readers to find sections of special interest to them.

Background Information: This section shows the programs origin, objectives, and evolution. It includes when, why, and how the program began, who was involved, the main activities, and resources.

Purpose of Evaluation: Explain the purpose of the evaluation and what the evaluation was intended to do.

Methods: Describe the methods used to set up the evaluation and collect information. Describe how the tools were developed and tested

Continued

Continued

before use, who collected the information, and any other points which would affect reliability and validity. Include information on how the survey team was trained.

Data Analysis: Briefly describe the methods used to analyze the data.

Results: Present the facts, figures, and most important results. These can be graphically described in tables, charts, and graphs. Photographs can be included.

Conclusions: Describe effects or impacts of the program. Include the extent to which objectives have been achieved, which aspects of the program (planning, management, training, supervision, supply, etc.) are strong and which need improvement.

Recommendations: List recommendations, and how, when, and by whom they should be implemented.

Make decisions and take action

Evaluation is linked to future planning

The key part of the evaluation process is linking the evaluation results with the action to be taken; this is where the evaluation links into the planning phase of the management cycle. Whether you observe that the Volunteers need more supplies or determine that they do not have sufficient stocks from the results of the monthly monitoring forms, the important point is that you take action to improve the program.

Link evaluation results with action to be taken.

Timing and duration of monitoring and evaluation

Regular monitoring prevents piling up of information

Regular monitoring should be built into the ongoing program. Trainer/Supervisors should collect monitoring reports from the Volunteer Health Sisters each month and summarize them every 6 months. VHS Program Assessments, which also provide a supervisory function to support the Trainer/Supervisors, should take place at least once every 6 months.

Supervisory review results should be discussed directly with the VHS within a few hours or days of every supervisory visit. Results of all supervisory visits should be analyzed by the Trainer/Supervisor every 3 to 6 months to prevent piling up of information and also to obtain a clearer picture of program progress and impact.

Collection of data at regular intervals also assures minimal, but at least ongoing, supervisory contacts

Mid-term and final evaluations

If the program has been planned out for a specific project or funding period, for example as part of a "Five Year Plan," it is useful to conduct an internal evaluation of the overall VHS Program midway through its projected timeline as well as at the end of the original projected timeline.

The planning form below (Exhibit 10.13) is a useful tool for planning when data will be collected, for which indicators, for which objectives and/or activities, and from where.

Exhibit 10.13

Management Information System Planning Form

Service:

Objectives/Activities	Indicators	Periodicity	Data Source

Exercises

Exercise 1

Why Evaluate?

Discussion

Directions: Discuss, among those who are establishing a Volunteer Health Sister Program, the reasons why you each would be interested in conducting an evaluation of your program. Discuss the pitfalls if no evaluation is undertaken. Record key points.

Time: 30 minutes

Materials: Blackboard and chalk, or flip chart and markers

Exercise 2

Completing the Monthly Monitoring Form

Individual or Paired Group Case Studies/Discussion

Directions: Ask each person to work individually, or divide the group into pairs. Pass out 3 blank Monthly Monitoring Forms to each individual or pair. Each person or pair should complete 1 Monthly Monitoring Form for each of the following cases. After completing the forms, review a sample of the completed forms in the large group. Review any mistakes or points of confusion. Clarify the correct method for completing the form in each case.

Case A Shaheeda is a Volunteer Health Sister whose 2-year old cousin, Rahim, had diarrhea. Shaheeda's uncle brought the child to Shaheeda. Shaheeda showed her uncle how to prepare ORS and she administered a half cup to the child. She then gave her uncle 3 packets of ORS and her own water jug, on which she had marked a liter measurement. Shaheeda told her uncle to go to the clinic if the child began to show any danger signs, which she also explained in detail to him.

Case B Bibi Jan's 4-year old daughter stepped on some hot coals from the fire that had been made to cook the family's dinner. Bibi Jan brought the crying child to Shaheeda. Although the burn was small, only the size of a coin, the burned area was beginning to blister. Shaheeda poured cold water over the foot and wrapped a clean cloth lightly around the foot. After the child and mother were calmed down, Shaheeda explained how to prevent such burns from occurring in the future. Shaheeda invited Bibi Jan to return again to learn more about preventing other household injuries.

Continued

Continued

Case C Shaheeda's husband was very supportive of her work as a Volunteer Health Sister. He was proud that she was able to help so many people in the village. He had often heard from her how important it was for children and pregnant women to be immunized. Since the mobile immunization team would soon be coming to the village, Shaheeda's husband suggested that he could explain the prime messages about immunization to the men in the village after Friday prayer. Shaheeda taught him very accurately and completely the information about vaccination and lent him the poster about vaccines. Her husband came home from prayer very satisfied. He had spoken with 10 other men about immunization, and all of them assured him they would bring their children for vaccines when the mobile team arrived.

Time: 30 minutes (15 minutes for 3 cases, 15 minutes discussion)

Materials: Blank monitoring forms, pens or pencils

Exercise 3

Completing the 6-Month Summary Form

Individual or Group Exercise

Directions: Use the same type of method as in Exercise 2 (individual or paired work groups). Pass out 2 sets of the 6-month Summary Form to each individual or pair. Each person or pair should complete a Summary Form using the information from the same Monthly Forms in Exercise 2. Review a sample of the completed Summary Forms in the large group. Review any mistakes or points of confusion. Clarify the correct method for completing the 6-month Summary Form.

Time: 25 minutes (10 minutes to complete summary forms, 15 minutes discussion)

Materials: Completed Monthly Monitoring Forms from Exercise 2, blank 6-month summary forms, pens or pencils

Exercise 4

Giving Feedback about the Monthly Monitoring Form

Small Group Role Play/Discussion

Directions: Divide into groups of 3. Role play the situation below. Return to the large group. Discuss methods for giving feedback to a Volunteer. Clarify how to properly complete the Monthly Monitoring Form.

Continued

Continued

Roles: 1 Trainer/Supervisor, 1 Volunteer Health Sister, 1 Observer

Situation: The Volunteer Health Sister has turned in her monitoring form incorrectly for the second time. The Trainer/Supervisor tries to determine why she is confused and to clarify how to fill it out.

Time: 25 minutes (15 minutes for role play, 10 minutes discussion)

Materials: Monthly Monitoring Form, pens or pencils

Exercise 5

How to Use Information from Evaluation Tools

Small Group Exercise

Directions: Divide into groups of 3 or 4. Each group should select one of the following tools which can provide valuable information for evaluation:

- Photographs
- Field observations
- Profiles of Volunteer Health Sisters
- Workshop Evaluations
- Maps
- Supervisory checklists
- Session evaluations from Health Sister training
- Structured survey
- Interviews with villagers
- Information from meetings with elders or the shura

Each group should develop a hypothetical situation in which you have gathered information, using the form, at baseline and then again 6 months later. Explain in front of the small group how you have gathered the information, what you have learned from the evaluation about the progress of the program, and how you will use these results to improve the program in the future.

Select 1 or 2 groups to present in front of everyone.

Time: 45 minutes (30 minutes for small group exercise, 15 minutes for large group presentation)

Materials: Photographs, maps, Supervisory Review Forms, chalkboard and chalk or flip chart and markers

Exercise 6

Common Field Problems in Conducting a Survey

Small Group Role Plays

Directions: Divide into groups of 3. Each group should review the role plays below and enact all 3 of them. Return to the large group and request each group to reenact the role play which they consider to be the one with the most important lesson; discuss.

Role Play A

Roles: 1 Interviewer, 1 Respondent, 1 Child (but acting as many)

Situation: An interview is underway with a mother to evaluate her knowledge about immunization, but the situation is very chaotic. Babies are crying, children are pulling at the respondent, people are entering and leaving, asking the respondent questions.

Role Play B

Roles: 1 MCH Regional Health Officer, 1 Angry Village Leader

Situation: The MCH Regional Health Officer is midway through conducting a group interview with community members when an angry leader, who has not been contacted earlier, tells the MCH Regional Health Officer that he has not been shown any official letter and the Officer should leave the village immediately and never return.

Role Play C

Roles: 1 Field Supervisor, 1 Trainer/Supervisor

Situation: A representative from the Ministry of Public Health has arrived at the VHS site to conduct a survey with some external consultants. The Trainer/Supervisor had received a letter announcing the visit several weeks earlier. However, the representative says that the survey team must use female interviewers from the area in order to effectively interview the mothers in the homes. The Trainer/Supervisor cannot find a female interviewer on such short notice.

Time: 1 hour, 20 minutes (40 minutes for small groups, 40 minutes for large group)

Exercise 7

An Overall Plan for Your Monitoring and Evaluation System

Small Group Exercise

Directions: Divide into groups of 3. Using Exhibit 10.13, the "Management Information Systems Planning Form," as a format, develop a monitoring and evaluation plan for at least 2 objectives. Two groups will then present their plan in front of the entire class. Discuss whether the system is affordable, whether the information will provide quality information, and what type of decisions can be made from the information collected.

Time: 2 hours (1 hour and 15 minutes for development of plan, 45 minutes for presentation and discussion.)

Materials: Flip chart and markers, or transparencies and overhead projector

CHAPTER 11

Quality Assurance

What is quality?

Maximizing impact on health status

Despite the importance of quality in health care, most public health efforts in Afghanistan have been focused on rebuilding the health infrastructure destroyed by the war. Other developing countries and even industrialized nations need to place more emphasis on quality of health care, because poor quality can be costly in terms of wasting limited resources. Despite the fact that simple, primary health care technologies exist, there is a gap between how technologies are designed to be implemented and how they actually are delivered to and used by the population. By focusing on quality, MCH and VHS Program managers can better use scarce, valuable resources in a way to maximize their impact on health status. This chapter discusses, for the Program Manager and for Trainer/Supervisors, the importance of quality health care and steps for assuring quality so that women and children in the community receive the best volunteer services possible.

Definition of quality

What is quality? Quality is:

- ***Good performance***
- ***Doing the right thing***

Quality is perceived differently depending on whom you ask. A mother, a VHS, a doctor or nurse, or a health program manager will place a different emphasis on factors such as technical competence, safety, access to services, interpersonal relations, efficiency, and features such as confidentiality or cleanliness of a facility.

Why is quality important?

Quality health care is important because a person who does not receive proper medical treatment or accurate health information may not get better. If the patient does not get better, the health services are wasting time, money, and drugs. Moreover, patients who do not get better lose confidence in the health care system. Ultimately the health service loses credibility and community support for the health service can be lost. In contrast, what happens when a VHS performs well in her community?

- The Volunteer Health Sister gains respect and higher social status
- More people are interested in the outreach program leading to facilitated recruitment of more Health Sisters and broader coverage
- Improved health of individual families and broader coverage have a positive effect on the health status of the community
- Individuals in the community are satisfied

Factors that affect quality

Problems in the system can affect quality of care

The effectiveness of the VHS Program relies on the quality of the program's components (such as facilities, personnel, and administration) and management systems (such as training and supervision). Difficulties at any level, system, or component can affect the performance of the entire program (see Exhibit 11.1). For example, if the central logistics and supply system is weak, the quality of the Volunteers' service at the community level will suffer.

If a single Volunteer can effectively transfer her health knowledge and skills to women in the village, is the VHS Program successful? Not necessarily. If the systems that support her work, like training, supervision, or monitoring, are not all performing well, the program will suffer (see Exhibit 11.2).

Exhibit 11.1

Dimensions of Quality Assurance

Exhibit 11.2

Potential Problems in Management Systems

The VHS may not have sufficient supplies.	Logistics and supply system problem
She may stop her activities after several months because her supervisor has not met with her in order to provide encouragement or feedback about her performance.	Supervision system problem
She may forget some technical points after some time or lose the chance to learn about additional topics like malaria if there is no refresher training.	Training system problem
If she does not accurately and completely fill out her monitoring form, estimates for resupply of VHS products are inaccurate, leading back to a supply problem.	Monitoring system problem

Who defines quality of care?

Different perspectives on quality

To provide high quality VHS services, consider how different people involved in the program view quality.

For village women, quality care is means that the health provider cures the illness, or at least treats the symptoms. The patient is especially satisfied if the provider also treats the patient politely and in a timely manner. The patient's perspective is very important to understand because if she is satisfied, she will more likely comply with health education messages and treatment, and will utilize primary care services again in the future.

The patient does not always fully understand the value of certain practices affecting health, so the health provider needs to educate the community about health. The Volunteer Health Sister does this through sharing the prime health messages on 7 key health topics. The Trainer/Supervisor must consider the patient's views of illness and health, as well as the VHS's health beliefs. For example, a patient may believe that only yellow syrups can solve her health problem, or that a truly competent doctor always gives an injection. Satisfying the patient does not mean that the provider (whether a doctor or a Volunteer) should give an unnecessary medication, but the health provider should take into consideration the patient's views of quality in order to explain why a particular treatment, referral, or advice is, or is not, being given.

Health providers usually define quality care as improving the health of the patient by using their medical skills, appropriate equipment, and drugs. Doctors, nurses, MCH Officers, Basic Health Workers, Female Health Workers, and Volunteer Health Sisters all need effective and efficient technical skills and appropriate resources to provide quality care.

Health care managers also work to improve the health status of the people, but to deliver quality care they must meet the needs and demands of providers and patients. For example, they must coordinate logistical, material, financial, training, and supervisory resources to provide quality services. Quality care, according to the health care manager, is largely determined by the quality of the management systems.

What is quality assurance?

Closing the gap between actual and desired performance

Quality assurance is not a new concept, but it is a fairly novel approach to improving health care in developing countries. Quality assurance can be defined as "All the activities carried out to deliver quality health care," or "closing the gap between actual performance and desirable performance".

Even if a non-literate Volunteer Health Sister has learned well during her training, she will probably not give every health message to other women exactly as she has been taught, especially when she is still getting accustomed to being a Volunteer. She may forget to list the danger signs requiring immediate referral, for example.

Therefore, it is important to establish a systematic process for continually monitoring and improving the Volunteer Health Sister Program so that the population receives correct health information, correct and timely treatment and advice, and proper and timely referrals.

Continually improve the program's management systems (training, supervision, monitoring) in order to continuously improve the services of a VHS.

Therefore, this chapter will focus on what you can do, as a Program Manager or as a Trainer/Supervisor, to improve the quality of services offered by Volunteers. You may not be in a position to tackle management system problems which are beyond the scope of the VHS Program, but by learning how to improve the process of delivering high quality health care you can do the maximum possible for the VHS Program.

Planning, setting, and communicating standards

Quality should be considered from the outset of program planning. Quality in the design of the program saves time, energy, and resources later in implementation.

Design a quality program

Do it right the first time.

Planning a VHS Program requires setting standards concerning what advice the VHS should give, how she should treat basic illnesses such as diarrhea and common cold, and when she should refer patients. The Volunteer Health Sister curriculum explicitly lays out the prime health messages which are important for the VHS to communicate to mothers. However, initially some prime health messages are more important than others. The standards which are initially most important are those that pertain to conditions which are *high risk* (can directly result in a more serious illness or death), *high volume* (frequently occurring), or *problem-prone* (conditions which often are not diagnosed or treated properly).

Concentrate on high risk, high volume, and problem-prone conditions

Examples of such dangerous conditions for which the Volunteer must "do the right thing" include:

- diarrhea (especially when accompanied by dehydration)
- pneumonia
- danger signs in pregnancy or delivery
- heavy bleeding from an injury

As the Volunteers learn to manage these situations, the standards should be raised. Standards for less urgent prime health messages should then be increasingly emphasized.

A standard for control of diarrheal diseases is shown in the example below. Once standards are set and agreed upon, they must be effectively communicated to everyone involved in the VHS Program through the following process.

Communicate standards clearly

1. The Master Trainer needs to understand the standards and communicate them to the Trainer/Supervisors during Training of Trainers Workshops.
2. The Trainer/Supervisor should make it clear to the Volunteers that they must know the steps to prepare and administer ORS before they can distribute it and teach other village women.

3. Local supervisors must know the standards so that they can effectively evaluate the Volunteer's performance.
4. Even the community should understand the Volunteer's role and standard of care with regard to treating diarrhea. The Trainer/ Supervisor, local supervisor, and Volunteer can continuously inform community members about the Volunteer's specific skills and limits so that expectations are clear.

How does the Trainer/Supervisor ensure that the Volunteer is "doing the right thing" when giving health advice, treating a patient, or referring a patient? The Trainer/Supervisor needs to monitor the performance of the Volunteers.

Monitoring the VHS Program

There may be problems in the process

As mentioned in Chapter 10, "Monitoring and Evaluation," you should always monitor your program to see if it is meeting its objectives. If you discover, for instance, that the Volunteers do not fully understand the prime health messages, there may be something wrong with the process of transferring the health information to Volunteers so they can teach other women.

Focus on the process.

Exhibit 11.3

Standard for Control of Diarrheal Diseases Module

All volunteers should be able to correctly:

- Describe 3 ways to prevent diarrhea
- Demonstrate and explain preparation of ORS with a packet by:
  a. using a liter container or a container marked to show a liter level
  b. using the correct amount of water
  c. using the entire packet of ORS
  d. stirring ORS until it is completely dissolved
- Demonstrate how to administer ORS
  a. slowly with a spoon, 1 cup after each loose stool
  b. giving more if the child wants more
  c. if the child vomits, wait 10 minutes, then give fluids more slowly, 1 teaspoon every 2 to 3 minutes
- Describe 3 signs of dehydration which require immediate referral

If a regional field supervisor visits a health center and notices during a refresher training session that about half of the 20 Volunteers cannot accurately demonstrate how to prepare and administer ORS, what should be done? The most common reaction may be to suggest retraining them. Does this solve the problem?

It depends on what the problem is!

- Perhaps the Trainer/Supervisor assumed that the Volunteers' performance was satisfactory since all of them could list 2 ways to prevent diarrhea and most of them knew to use a 1 liter measuring cup.
- Perhaps the Trainer/Supervisor did not know that the standard or expectation for performance included stirring the salts and water until the mixture was dissolved, or giving spoonfuls of solution slowly to the child. A clear standard had not been set.
- Perhaps the Trainer/Supervisor had an internal understanding but did not clearly communicate this to the Health Sisters.
- Perhaps the Trainer/Supervisor did not appreciate the importance of accurate measurements; he had been unable to attend a workshop on protocols for diarrheal diseases.
- Perhaps the Trainer/Supervisor worked in a very conservative area where he could not directly observe these village women working in the homes; he had not realized, until the refresher course, that the Volunteers were not practicing what he had taught them. The local supervisor may not have known the standards and so accepted a lower level of skills when she supervised the Volunteers.

Focus on why the program is or is not succeeding rather than on whether or not it does succeed.

Steps for solving problems in the process

Several important points can be elaborated upon regarding this situation. First, the solution to the problem depends on the cause of the problem. Like a disease, one should find the underlying cause before prescribing a treatment.

STEP 1: Identify the underlying problem.

Second, to simply assess performance without communicating expectations can lead to erroneously blaming individuals for their performance when fault actually lies with the system (such as the training system or the supervision system).

STEP 2: Don't be punitive with the staff—communicate expectations and identify the critical step(s) in the process which need(s) to be improved.

Third, after defining the real problem, it is important to those people who are most familiar with the program (i.e., the MCH Regional Health Officer, the Trainer/Supervisor, the local VHS supervisor, and the VHSs) attempt to analyze and solve the problem. They are the ones who best understand the processes involved in the program.

STEP 3: Analyze and solve the problem.

There are several monitoring tools which help reveal problems in the process.

- **Supervisory Review Forms** can indicate, for example, who had been supervising the Volunteers; whether preparation of ORS had been focused upon during supervision; and if there was a correlation between those who knew how to accurately prepare ORS and those who were supervised).
- **Monitoring Reports** can be used along with Supervisory Review Forms to show if there was a correlation between the workers who could accurately prepare ORS and the frequency with which they were teaching about diarrhea. Monitoring Reports can also be used to show the magnitude of a problem: if those who were incorrectly preparing ORS were actively teaching many other women incorrectly (as indicated by high numbers of health education contacts), then the problem would require immediate attention.
- **Information from previous assessments** can reveal whether or not there were changes in the Trainer/Supervisors' knowledge or performance, and then discussions could lead to uncovering valid reasons for problems (such as delay in salary payments for the Trainer/Supervisor or the difficulty of holding refresher training for Volunteers due to months of snow).

Identifying problems and selecting opportunities for improvement

80% of the trouble arises from 20% of the problems

The monitoring information will reveal potential problems in the program. Selection of problems can be based on a principle (known as the Pareto Principle) that 80% of the trouble comes from 20% of the problems. In the example above, assume that the problems in this case are:

1. The training system is weak because the VHSs skills are not being assessed during each training session.
2. The supervision system is weak because the Trainer/Supervisor is not aware of the limited frequency of VHS supervisory visits during the winter.
3. The supervision system is weak because the performance of the VHSs is not being accurately reflected in the Supervisory Review Forms.
4. The monitoring system is weak because Monthly Monitoring Forms are not being completed by most of the Volunteers.

Once several problems have been identified, you can select one or two problem areas as priorities. Criteria for selecting problems should also include the feasibility of addressing the problem, the potential impact on the health of the population by solving the problem, or the availability of resources.

After selecting 1 or 2 priority problems, the next step is to state each problem clearly in a way that shows the gap between actual performance and the performance as prescribed by standards and guidelines. This can be quite difficult to do even though it sounds simple. People often concentrate on a problem of inputs ("We need vehicles for transporting people to training"), or a premature solution ("We need more community workers"), or a blaming statement ("Volunteers sometimes forget what they have been taught"). Problems need to be defined in terms of how the problem relates to the quality of services or the health of the population. The problem statement should refer to a specific process or activity so that the solution is focused and measurable.

How does the problem relate to the health of the population?

With a well-defined problem statement, one is forced to think through the steps involved in the program and to think about the various breakdowns in the systems which may contribute to the problem.

Exhibit 11.4

Defining Problem Statements

Poor Problem Statement	**Well-Defined Problem Statement**
Volunteers sometimes forget what they have been taught.	VHSs are not being assessed for their knowledge and skills during initial training.
We need more local supervisors.	Supervision of VHSs is conducted without sufficient attention to the ability of the VHS to correctly demonstrate preparation and administration of ORS.
The monthly monitoring tool needs to be revised.	Monthly monitoring tools are not being completed by most of the VHSs.

Using analytical and statistical tools

A variety of tools can be used to analyze and study a problem and its root causes, some of which have already been mentioned. These tools can be categorized into 2 types: analytical tools and statistical tools. Analytical tools are particularly useful for capturing ideas, categorizing, and prioritizing. Since analytical tools do not always provide enough information alone, statistical tools are required to examine root causes in more detail. Exhibit 11.5 lists various types of analytical and statistical tools. The statistical tools have already been introduced in earlier chapters. Examples of the analytical tools can be found in Appendix G.

Exhibit 11.5

Tools for Problem-Solving

Statistical Tools	Analytical Tools
Supervisory Checklist	Brainstorming
Monitoring Forms	Fishbone (Cause and Effect) Diagram
Questionnaire	Flow Chart

Choosing a team

Decentralization and empowerment

One of the key differences between using a quality assurance approach to management and applying a traditional external monitoring approach is that quality assurance involves decentralization and empowerment (Blumenfeld, 1992). The Ministry of Public Health, the top level of the primary health care system, may still establish policy direction and goals, but the responsibility for producing results (improved health of women and children), by ensuring the quality of the processes, is shifted to the VHS Program managers, Trainer/Supervisors and the local supervisors. The skills and tools to monitor the process are also handed to the health workers in the field. Experience shows that no one in the system is in a better position than the health workers to know early what is going wrong, to understand why, and to be able to produce a feasible solution.

Who should be on the team?

To integrate quality assurance into national or regional Volunteer Health Sister Programs, the program manager should assign a small team of Trainer/Supervisors, Master Trainers, local supervisors, and representative MCH Regional Health Officers to address specific problems during annual work planning. The team can then be responsible for analyzing the problem, developing a quality improvement plan, implementing the solution, and evaluating the quality improvement effort. This way, the manager can reasonably incorporate quality assurance activities into the team's projected workload. It also provides a natural marker for planning new activities. Although it is unlikely that a VHS

will attend a work planning meeting, the views of the VHSs should be represented either through separate discussions.

Exhibit 11.6

Critical Steps in Training and Supervision

1. When communicating with the Volunteer Health Sister, make sure she understands her job description, and that she knows her own limits.
2. During initial training, check the knowledge and skills of each Health Sister on the day she is taught about a new topic.
3. During refresher training, recheck knowledge and skills.
4. During supervisory visits, assess the Volunteer Health Sister's knowledge and skills in a real life situation, or role-play if necessary.

Analyze and study the problem to identify the root cause.

Critical steps

What are critical steps?

Critical steps are points in a process where a mistake will poorly affect a person or other parts of the health system. If a Volunteer Health Sister does not carefully check for rapid breathing when a sick child with a severe cough is brought to her, she may incorrectly recommend home care for a cold rather than refer a child with pneumonia to the clinic. The child could die as a result. It is for this reason the Trainer/Supervisors should always follow the prescribed standards of training and supervision.

These critical steps will detect errors in the health service encounter that the Health Sister has with women and children in the community.

Supervisory Review Forms, Monitoring Reports, and survey questionnaires are tools which have already been introduced in previous chapters. The exercises at the end of this chapter will demonstrate how they can be used in studying the problem, along with traditional tools like bar graphs. Analytical tools can reveal problems which have a common cause and those which have a special cause.

For example, after compiling the results of Supervisory Review Forms it is obvious that there is a certain amount of variation between the Volunteer Health Sisters' performance even if they live in the same area, have the same

educational level, and are trained by the same Trainer/Supervisor. However, if there is a significant difference between one set of results and another set (for example, if the results of supervision at one facility are very different from results at another facility), there may be **special cause variation**. This could be due to different quality training; or perhaps the Volunteers in one area were carefully selected from a group of women who repeatedly attended health education sessions at the clinic, while another group was comprised of women who were interested in the program but who were not required to attend the majority of training sessions.

Developing solutions and actions for quality assurance

Start small or start big?

After analyzing the problem and identifying root causes, the next step is for the team to develop solutions. Solution development can be very simple or more complex, involving management systems. A solution may be as straightforward as showing the Trainer/Supervisor how to assess the VHSs during initial training. It may be as simple as scheduling refresher training for Volunteer Health Sisters to the morning hours, or changing the location so that more can attend. Solutions which involve the larger management systems can be more difficult to solve—like how to get resupplies to outreach sites in distant locations. To make program changes at a large number of sites, decisions will need to be made about whether the solution should be carried through in a limited pilot test or on a broad scale. If substantial resources are required or if the solution is questionable, it is better to start small.

Exercises

Exercise 1

What is Quality?

Discussion

Directions: Discuss the following questions.

a. What do people want from the health services in rural Afghanistan?

b. What do people expect when they come to a clinic?

c. What will be the reactions of patients who get more than they expect?

d. What should people expect from a Volunteer Health Sister?

Continued

Continued

e. What should a Volunteer Health Sister expect from the community? What should she expect from the formal health system?

f. What should a Trainer/Supervisor expect from the program manager(s)? What will be the result if the Trainer/Supervisor is satisfied?

g. What does a program manager expect from the formal health system?

h. What can the manager do to satisfy program staff?

Time: 30 minutes

Materials: None

EXERCISE 2

MEASURING QUALITY THROUGH USE OF AN OBSERVATION/SUPERVISORY CHECKLIST

LARGE GROUP ROLE PLAY

Directions: Select 3 people to perform the role play in front of the large group. Explain that the observer will be measuring the quality of the health contact with the use of an observation/supervisory checklist, but only the Observer will have the checklist in hand. Give only the Observer the "Observation Checklist for Ill Children" (Exhibit 11.8) which follows these exercises.

As the role play is carried out, the Observer should fill in the checklist as if supervising the "nurse". The large group should observe the interaction between the mother and nurse. At the conclusion of the role play, ask the large group how well the nurse performed her duties (you can ask what score they would give, from 0-100%).

Next, hand out copies of the Observation Checklist to everyone in the large group and ask the Observer how he or she rated the visit using the checklist. The Observer should explain to the class which steps the nurse skipped while assessing the sick child. Ask the Observer how he or she would rate the assessment with a score. Finally, ask the "mother" and "nurse" how each of them would have rated the quality of the service. Discuss:

1. What are the advantages of measuring quality with a checklist?
2. Are some points on the checklist more important than other points?
3. How can the checklist improve performance of the health worker?

Roles: 1 Nurse, 1 Mother, 1 Observer

Continued

Situation: The mother brings her sick infant to the clinic. The nurse assesses the child's medical condition.

Time: 40 minutes (20 minutes for role play, 20 minutes for discussion)

Materials: "Observation Checklist for Ill Children", blanket or doll, pen or pencil

Exercise 3

Flow Charts and Fishbone Diagrams

Small Group Exercise

Directions: Divide into groups of 3 to 5 people and carry out exercises 1 to 4 below. Present 1 or 2 Fishbone Diagrams and Flow Charts.

1. Construct a Fishbone (Cause and Effect) Diagram of the problems which result in under-utilization of Volunteer Health Sisters.
2. Construct a flow chart of activities required to set up a Volunteer Health Sister Program in a village. Assume that the Trainer/Supervisor has completed a series of workshops on how to develop the program.
3. Review the flow chart. Determine which are the critical steps and mark them.
4. Answer these questions: What will be the result in quality of care if an error is made at each of these steps? What can be done to avoid an error or detect a problem before it has costly circumstances (in terms of time, resources, or lives)?

Time: 4 hours (3 hours small group work, 1 hour presentations)

Materials: Flip chart paper and markers

EXERCISE 4

ANALYSIS OF DATA AND SOLUTION DEVELOPMENT

CASE STUDY

Directions: Using the same groups of 3 to 5 people, read the following case study and complete the activities and questions which follow. Select 2 groups to present.

Case Study Dr. Ahmad Aziz was the person responsible for MCH activities, including the Volunteer Health Sister Program, in one of the regional health administrations. At the end of the year he received the latest 6-month Summary of Monitoring reports from 12 out of the region's 20 program sites.

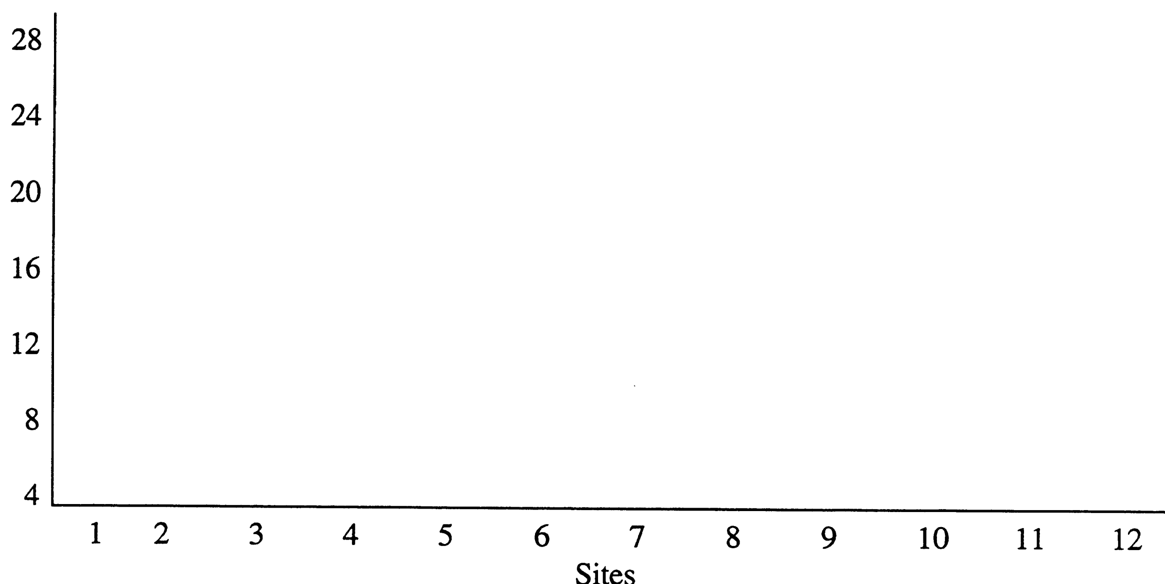
He compiled the information to focus on the number of active Volunteers at each site and the quantity of ORS distributed to get a sense of the productivity and/or utilization of the Health Sisters:

Facility #	# Active VHS	# ORS Packets Distributed (6-Month Summary)
1	15	600
2	20	1200
3	25	800
4	23	1500
5	18	2000
6	20	500
7	4	300
8	7	600
9	5	400
10	10	800
11	10	1000
12	6	500

a. Draw a bar chart which illustrates the number of active Volunteer Health Sisters at each of the 12 sites.

Continued

Continued



b. What does the bar chart indicate about the activity of the program at various facilities?

c. Explain what may be the reasons for the variations in distribution of ORS. Which reasons are due to a common cold? Which reasons are due to a special cause?

d. Calculate the average number of ORS packets distributed at each site. Is there a correlation between the number of packets distributed and the number of active Volunteer workers?

e. Dr. Ahmad Aziz notices from this simple analysis of data that there appear to be a several clear variations at several sites. In reviewing the assessments carried out at the sites, he finds that the Trainer/Supervisors of facilities #1-6 were trained at a different Training Center than those at facilities #7 -12. The assessment reports also indicated community dissatisfaction with the program in facilities #3 and #6.

Dr. Ahmad Aziz calls a meeting together with a staff member from the nearest Training Center, with one of the local Trainer/Supervisors, and with the Field Supervisor who conducted the assessments. He reviews the data with them.

f. What further study or data collection should be undertaken?

g. Select a problem which is leading to community dissatisfaction and poor product distribution rates.

h. What are potential solutions?

i. How can the solution be implemented?

Continued

Continued

j. How will the intervention be monitored?

k. Approximately how much would it cost to implement the solution?

l. Is receipt of 12 out of 20 reports an acceptable standard for the information system?

Time: 3 hours (2 hours for small group work, 1 hour for presentations)

Materials: Flip chart, markers, calculator

Exhibit 11.7

Observation Checklist for Ill Children

Does the health worker determine:

1. Age .... Y N
2. Weight .... Y N
3. Temperature with a thermometer .... Y N
4. Temperature by touching the child .... Y N
5. Look at the child's health card? .... Y N
6. Refer the child for vaccination? .... Y N

Does the health workers ask questions about:

7. The duration of the illness? .... Y N
8. History of fever? .... Y N
9. Chills? .... Y N
10. Vomiting? .... Y N
11. Number of stools in past 24 hours? .... Y N
12. Blood in the child's stool? .... Y N
13. Coughing? .... Y N
14. Difficulties in breathing? .... Y N
15. Throat swelling or difficulty in breathing? .... Y N
16. History of home treatment? .... Y N

Does the health worker examine:

17. Eyes .... Y N
18. Ears .... Y N
19. Throat .... Y N
20. Breathing .... Y N
21. Abdomen (palpitation) .... Y N
22. Skin turgor .... Y N
23. Respiratory rate (timed, touching bare skin) .... Y N

	Diagnosis		**Health worker**		**Observer**		
24.	Diarrhea		Y	N	Y	N	UD
	Dehydration	None	Y	N	Y	N	UD
	(signs)	Moderate	Y	N	Y	N	UD
		Severe	Y	N	Y	N	UD
25.	Cough/cold		Y	N	Y	N	UD
26.	Pneumonia/bronchitis		Y	N	Y	N	UD
27.	Fever/malaria		Y	N	Y	N	UD
28.	Other:________________		Y	N	Y	N	UD

Continued

Does the health worker:

29. Explain how to prepare ORS? .... Y N
30. Demonstrate preparation of ORS? .... Y N
31. Have mother return demonstration? .... Y N

Education of the Mother

Does the health worker explain to the mother:

32. How to administer
    Chloroquine? .... Y N NA
    Paracetamol? .... Y N NA
    Antibiotics? .... Y N NA
    ORS? .... Y N NA
    Other?__________ .... Y N NA

33. The importance of completing the treatment? .... Y N
34. To return to the health center if the child does not improve? .... Y N
35. To give more fluids than normal? .... Y N
36. To give fluids after each stool? .... Y N
37. To give fluids after child vomits? .... Y N
38. To continue feeding or nursing the child? .... Y N
39. To give the child a sponge bath? .... Y N
40. Not to dress the child too warmly? .... Y N

Does the health worker:

41. Ask the mother questions to see if she has understood?
    (yes/no only is unacceptable) .... Y N
42. Ask the mother if she has any questions? .... Y N

CHAPTER 12

Planning Human Resources

What is human resource planning?

This chapter is for the MCH or VHS Program Manager to use for determining how to staff the Volunteer Health Sister Program. Managing a program entails planning the type and quantity of staff needed to carry out all activities. Staffing is the process of determining what kinds of workers are needed, selecting the most motivated and/or qualified people, facilitating their entry into the job, and training workers. Staff planning also includes projecting the required number of various staff needed to serve the population.

The core staff of a Volunteer Health Sister Program are the Health Sisters, the Trainer/Supervisors of the Health Sisters, master trainers, and the program manager. Each has special tasks and qualifications—educational, clinical, and/or administrative—which form their job description.

Selection of staff

Important factors in staff selection

Usually the staff recruited for the program, except for the Volunteer Health Sisters, will have other tasks in addition to their responsibilities for the VHS Program. For this reason, it is important to select those who have sufficient time and incentive to fulfill their program responsibilities. It may be necessary to change the existing job responsibilities when adding VHS tasks. This will require the support of the organization's senior management.

Managers should develop clear requirements for staff recruitment that specify the qualifications needed to meet the program's objectives. The manager should ensure that all staff members:

- are committed to the Volunteer Health Sister Program and have a sincere belief in its benefits

- are competent to carry out all the tasks assigned to them
- are sensitive to the needs of clients
- know their responsibilities and those of co-workers
- remain motivated to provide the best service possible

In selecting program sites, it is therefore important to factor in the qualifications and interest of the available staff at the site to serve as Trainer/Supervisors. Chapter 4, "Recruiting and Selecting Volunteer Health Sisters," outlines the criteria for selecting Health Sisters and Supervisors.

Staff selection may be complicated by the fact that managers may not have much control over selecting staff. The manager may:

- have to recruit personnel from among those already employed in an existing health center
- be limited by civil service and other governmental regulations
- be prevented from choosing the best person for the job by political, social, or economic pressures
- lose the best candidates due to the inability to offer competitive salaries

No matter how well-designed or well-funded the Volunteer Health Sister Program is, health information and services will be delivered effectively only if tasks are properly assigned to the appropriate staff, and if staff have the skills required to do their jobs, are sensitive to the clients' needs, and respect the beliefs of the clients.

In many circumstances, your staffing is decided for you. However, when a new program is starting up, or when you feel that modifying the staffing pattern could improve program performance or the quality of care, you may need to estimate staff requirements.

Projecting human resource requirements

Steps for determining human resources requirements

Projecting or revising staffing requirements involves 4 steps:

1. **Estimate the demand for services.** This step has 2 parts: an estimate of how many potential clients there are in the community and an estimate of the expected rate of utilization of the Volunteers. The estimates for the start-up phase of the program tend to be rougher than those of the maintenance phase. Once the program is underway, productivity levels and utilization rates can be based on actual experience. You may initially estimate, for example, that in Paktya Province one Volunteer is required for every 10 households in order to reach all target families; you may then find after 18 months that one

Volunteer is required for every 15 families because the VHSs are increasing their coverage areas.

- How many potential clients are in the community (village, district, or province)?
- Are people aware of the Volunteer Health Sister Program and do they know how to obtain services?
- To what extent will cultural and political barriers prevent individuals from using the Volunteer's services?
- Is the program targeted only to rural villages where there are very limited health services, or to areas with a variety of health care providers?

2. **Establish standards for quality of care.** In this step, you must carefully review the level of care that the Volunteers are expected to provide in terms of quantity (e.g., number of Volunteer service contacts) and quality (standards of care for each module).

    - How many hours per week, on average, should training take place in order to train effectively?
    - How many supervisory contacts per month, on average, will be required to effectively supervise the Volunteers at this stage? What standards of quality will be required?
    - How many service contacts, on average, will Volunteers have per month? What standards of quality will be required?
    - For each category of staff involved in the program (including regional health staff and Master Trainers), how much time will be required to work on Volunteer Health Sister activities?

3. **Project Staff Requirements.** Review the volume of activities that you anticipate and the standards that you have developed. For each type of staff, compare your standards to the existing practice.

    - Are there changes in staffing that should be made to provide high quality services?
    - If you are starting up a new program, how many and what kind of staff are required to deliver quality services?

There is an expected dropout rate within most volunteer systems, but the volunteer system can be designed to accomodate such turnover. A volunteer system can offer opportunities for advancement, for example, by promoting the most active and effective Volunteers to become local supervisors as the program expands. It is important to remember that training of Volunteers is an educational process, so that even if a Volunteer does become "inactive," she has learned important health facts.

> *Even a volunteer who drops out of the system has learned important health facts.*

4. **Consider Resource Availability.** After determining the number of Volunteers, Supervisors, and Trainer/Supervisors required, you must consider the resources available. If the required resources are not available, lower the estimate of demand accordingly.

You need to be flexible when planning resources for a voluntary system. Paid staff may increase the number of Volunteers in their area as they try to reach more and more women and children. The productivity levels will also tend to increase over time, as each Volunteer visits more households and as the program becomes better established. The numbers of Supervisors and Volunteers may change at different rates at different sites depending on geography, village size, distances between homes, mobility of women, average number of children in each household, local work ethic, and the level of monitoring and supervision at the regional and central levels.

Service ratios

How to calculate service ratios

Service ratios are the projected number of health staff (or facilities) required per population size. The Volunteer Health Sister ratio, for example, would be the number of Volunteers required to satisfactorily meet the needs of their catchment area. Assume that 1 Volunteer Health Sister provides active or passive service to approximately 10 families. If the average family size in the area is 6, then the service ratio would be 1 Health Sister for 60 people.

Initially one can assume an average of 1 Supervisor to 10 to 20 Volunteer Health Sisters, or a ratio of 1:10 to 1:20. A mature program could efficiently manage with 1 Supervisor to 20 Volunteer Health Sisters, or a ratio of 1:20, but Supervisors should maintain a standard of at least monthly contact with each Volunteer.

An example of determining service ratios follows.

Exhibit 12.1

Service Ratios for a Volunteer Health Sister Program

Assumptions: 1 Health Sister : 10 families

20% of the population is under age 5

Average family size = 6

Village Example

If the village has 400 families, then the population of the village is 2,400 (6 people per family x 400 families).

In this village there would be about 480 children under age 5 (20% x 2,400 population).

If 1 Health Sister can cover 10 families, then a village of 400 families would require 40 Health Sisters to cover all families in the catchment area (1:10 = X:400 where X is equal to 40). This village with 40 Health Sisters would have 1 Health Sister for every 12 children.

District Example

If the district has an estimated population of 35,000, there would be about 7,000 children under age 5.

A population of 35,000 would have about 5,833 families.

If 1 Volunteer covers 10 families, then the district plan would need around 583 (5,833 divided by 10) Volunteers. This district would also have a ratio of Volunteers to children under age 5 of 1:12.1.

If, however, there are significant barriers to utilization of Volunteers, you may change the assumption to a ratio of 1 Volunteer to 15 families, since not all families would use the Volunteer. If Volunteers are moving from passive to active outreach, you may decide not to increase the number of Volunteers, since they are increasing the number of families they reach. However, if the community is heavily utilizing Volunteer services and there are not enough VHSs to meet all the demands for services, you would need to increase the number of Volunteers.

Use a range of ratios to plan your program.
Consider minimum and maximum requirements.

Volunteer outreach is a dynamic process that needs to be monitored. Adjust your service ratios based on monitoring results.

Exercises

Exercise 1

Background Information for Determining Demand for Services and Quality of Care

Small Group Exercise

Directions: Divide the group into small groups of 3 or 4, preferably according to those who work in the same geographic area. Select 1 site for answering the following questions.

1. What is the population size of the communities (villages) to be served by the program?
2. How many potential clients are in the community?
3. Are people aware of the Volunteer Health Sister Program and do they know how to obtain their services?
4. To what extent will cultural and political barriers prevent individuals from using the Volunteers' services?
5. Is the program to be targeted only to rural villages where there are very limited health services, or to areas with a variety of health care providers?
6. How many service contacts, on average, will Volunteers have per month?

Time: 20 minutes

Materials: Flip chart paper, markers

Exercise 2

Determining the Number of Volunteer Health Sisters Required

Small Group Exercise

Directions: Using the information from Exercise 1 above,

1. Determine how many Volunteers are required for the site. List your assumptions.

Continued

Continued

2. Assuming that you would like to have a ratio of 1 Supervisor to every 15 Volunteers, how many Supervisors are required? List your assumptions.

Select 1 small group to present the results (including the results of Exercise 1).

Time: 40 minutes (25 minutes for preparation, 15 minutes for presentation)

Materials: Flip chart paper, markers

EXERCISE 3

ADJUSTING SERVICE RATIOS BASED ON MONITORING INFORMATION

LARGE GROUP EXERCISE

Directions: Read the following case to the large group, writing key figures on the board. Discuss the questions that follow the case.

Case The MCH Regional Health Officer is making a supervisory visit to one of his VHS sites. The clinic covers a population of 12,000. The clinic staff have trained 20 Volunteers over a period of 2 years and all are still active. Originally they estimated that the area would need about 100 VHSs to reach 2,000 families, or 2,400 children, if each VHS reached 20 families. (The clinic staff assumed 20% of the population is less than 5 years of age and the average number of persons per household is 6.)

The clinic staff have kept good records about each VHS, including her age, marital status, and literacy, and have regularly asked the VHSs how many families they serve. Reports show that for the first group of 10 VHSs who are still active, the average number of families served per VHS has increased from 10 to 20 between the first and second year of the program. The group of VHSs trained most recently averages about 12 families each. There are currently 2 local Supervisors.

The clinic staff would like to continue to train larger classes of VHSs, but they are concerned about whether they will be able to get enough supplies for 100 VHSs. Currently, the basic kit of VHS supplies is provided by the government. The Ministry has supplied 30 kits over the last 2 years for the VHSs, Supervisors, and Trainer/Supervisors.

The clinic staff sit down over tea with the MCH Regional Health Officer to decide on some new strategies. The MCH Regional Health Officer is interested

Continued

Continued

in collecting information on service ratios for planning next year's program for the entire region.

1. What is the service ratio of Volunteers to population?
2. What is the ratio of Supervisors to Volunteers?
3. How many families are served by all Volunteers?
4. How many more VHSs are required?
5. Can the clinic manage a program of 100 VHSs? Why or why not?
6. What are some strategies for having Volunteers reach the neediest families?
7. How can more families be reached by the Program?
8. The MCH Regional Health Officer indicates that the clinic will have the same budget for supplies and salaries for the next year, 1997, but if they can indicate a strong need for more resources, their plan will be incorporated into a proposal for 1998. He asks how many Supervisors they will need for 1998, and how many VHSs will be active in 1998. What do you tell him?

Time: 1 hour

Materials: Blackboard and chalk or flip chart and markers

CHAPTER 13

Financial Management

Skills in financial management are necessary for the manager of the Volunteer Health Sister Program because every manager is responsible for planning, monitoring, recording, and controlling financial resources used for the program. This chapter discusses a number of financial management concepts and skills necessary to carry out these tasks so that the program's resources are used in the most responsible, appropriate, and cost-effective manner possible.

Why is financial management important?

Financial management means managing resources to meet goals and objectives as effectively as possible by using those resources to carry out planned activities. Financial management also ensures that there are adequate resources available to carry out the planned activities.

Basic financial management skills

The financial duties of a VHS Program manager

Once the goal and objectives of the program have been set, the tools and techniques of financial management are used to ensure that adequate funds are available to achieve these planned objectives in the most cost-effective way. A Volunteer Health Sister Program manager needs to know enough about financial principles to be capable of:

- Preparing a budget for the work plan
- Projecting revenues (incoming funds or their equivalent) and monitoring cash flow (cash being received and disbursed)
- Controlling and managing funds
- Financial monitoring (comparing actual costs with budget projections)
- Determining and comparing the cost of services

- Meeting donor and institutional reporting requirements
- Understanding and using financial reports for decision making

Financial management in governmental and non-governmental programs

Cooperation between NGOs and governmental programs

The Ministry of Public Health and NGOs both need good financial management in order to know how much it costs to train, supply, and supervise staff, as well as to monitor and evaluate the Volunteer Health Sister Program. You cannot expand services cost-effectively without this information or select what expenses to cut if funding is reduced unless this type of information is available.

Most Ministry of Public Health managers receive a fixed budget allocation. If the allocation is insufficient, their only choices are to try to obtain an increase or to cut expenses. They often have limited control over hiring or firing staff or testing different strategies to increase income and cut expenses. A Program Manager working for an NGO usually has more flexibility. The NGO, for example, may have greater flexibility to test different community-contribution schemes because NGOs are generally smaller organizations than the government; they are not always restricted by policies of the government. In fact, for this reason, cooperation between NGOs and the governmental VHS Programs is important because the lessons learned in either organization can be shared with the other.

Good managers in both types of organizations need to provide the greatest amount of quality services possible for the resources available.

Preparing a budget

Why is budgeting important?

All budgets list or "itemize" the costs that are expected to be incurred when VHS activities are carried out. The budget estimates, for instance, that it will cost a total of $4000 to ship VHS kits from the central warehouse in Kabul to the regional supply depots. Budgets can also specify the income that is expected to cover these costs. For instance, a donor may agree to supply the vehicles and fuel to cover this total cost. A budget can be drawn up for a single activity such as a training workshop, or for the entire program or organization.

A program budget, such as that which would be used for the Volunteer Health Sister Program, is based on the year's work plan and on information about costs which are already covered in the central budget (for example, Training Center or health center staff which are already paid by other departments of the organization).

Budgeting is important because:

- The exercise of preparing a budget forces managers to think through each activity and detail.
- Budgets display essential information on projected expenses associated with planned activities; this information shows whether all planned activities are financially feasible and whether more income needs to be raised or costs need to be reduced.
- When developed according to work plans, budgets help managers ensure that resources are spent only on planned activities.
- Budgets allow managers to evaluate the actual costs of activities and thus to consider alternatives if the planned activities are too costly.
- Budgets help an organization prepare to secure funding to meet expenses by listing in detail the projected expenses (and, in some cases, the expected funding source).
- Managers can be forewarned of potential shortfalls in resources for specific activities by having a realistic budget and comparing it with actual expenditures.

Steps for preparing a budget

There are 3 basic steps to preparing a budget: identifying necessary resources, determining their costs, and determining sources of funding.

STEP 1: Specify resources required to implement program activities.

The budget should be consistent with the work plan. It is also important that the cost categories and line items also correspond to the accounting system of your organization, so that actual expenditures can be modified against the budget.

STEP 2: Assign a cost to each required resource.

Examples of cost categories and line items follow.

Exhibit 13.1

Cost Categories

Salaries
- Professional staff
- Administrative staff
- Non-medical staff (guards)

Vehicles & Transport
- Vehicle purchase
- Maintenance, fuel

Training/Workshops
- Transport for participants
- Materials
- Participant lodging
- Participant meals
- Workshop supplies

Staff Benefits
- Pension

General Travel Costs
- Bus, car, taxi
- Per diem

Supervision
- Transport
- Per diem

Office Costs
- Room/Office rent
- Utilities
- Stationery supplies
- Postage, shipping

Equipment and Supplies
- VHS Kits

Most costs will be "variable" costs—costs that vary with the scope of activities. Some costs will be "fixed"—incurred by the program no matter what the level of activity or volume of service is. Examples of fixed costs are rent, utilities, and most salaries. Both variable and fixed costs must be included in the budget.

Factors to consider during budget preparation are expected changes in costs for supplies and transport as well as contingencies, which are funds set aside for unexpected additional expenses (such as repairs).

Suppose the work plan of a Regional Health Administration includes starting a Volunteer Health Sister Program in 12 new sites during the next year. The manager preparing the budget needs to understand what costs are involved in this activity. The start up of a program will involve such costs as workshop materials, per diems and transport for participants, and kit supplies for the Volunteers.

Exhibit 13.2

Sample Budget Format

VHS Program: Regional Budget, 199_

Training		
Training of Trainers Workshops (3)		
Transport	$ 200	
Materials	500	
Participant lodging	2,000	
Participant meals	1,500	
Supplies	500	
Subtotal:		4,700
Supervision		
Regional assessment (2 assessments/site)		
Transport	150	
Per Diem	450	
Local supervision		
Transport	200	
Subtotal:		800
Equipment and Supplies		
132 Hygiene posters	264	
132 EPI posters	264	
132 CDD flip charts	264	
132 liter jugs	104	
264 marker pens	120	
75,600 packets ORS (151 cartons)	15,120	
39,600 bars soap (40 cartons)	3960	
Transport of supplies	3,600	
Subtotal:		23,696
Contingency		
Subtotal:		4,000
Total:		**$ 33,196**

All of the costs in the example above would be variable, since the salaries of all other personnel (program manager, Master Trainers, and Trainer/Supervisors) are already included in the organization's overall budget. For this particular program budget, the costs of the Training Center and its utilities are already be included in the central budget as well.

STEP 3: Determine sources of funding.

The final step in budget preparation is to determine where the resources required will come from and which expenses will be paid for by which funding source.

This step is simple if there is only one funding source, such as a government program. However, if the Volunteer Health Sister Program depends upon one or more donor sources, the task of financing the program can require preparation, submission, and approval of a proposal.

Projecting revenues and monitoring cash flow

Ensuring adequate funds

Managers must ensure they have adequate cash or funds in their allocation to cover all anticipated financial obligations each month. The first step in this task is to project the cash flow and funding availability during the planning process. The manager uses the work plan and budget to analyze the timing of anticipated expenditures in order to see if there are any periods in which there will be insufficient funds.

For example, if Volunteer Health Sister kits will be distributed to all Trainer/ Supervisors during the first workshop in April, one expects there will be a large outlay of cash for supplies in March. If the program receives equal quarterly or monthly payments, there will not be enough cash for this unusually high expense in March unless the manager takes special measures. Alternatives could be to:

- adjust the timing of activities in the work plan (purchase and distribute a portion of the supplies initially)
- rearrange a donor or ministry payment schedule so that large payments precede large expenditures
- arrange for a short-term loan

Controlling and managing funds

Ways to control funds

The control of funds of the Volunteer Health Sister Program will follow the same procedures set forth by the organization's overall accounting system. While financial managers or bookkeepers are responsible for setting up and maintaining the accounting and financial control system, the program manager should know about authorizing purchases and using a petty cash fund for disbursement of small amounts of money.

Since program managers are responsible for authorizing expenditures and purchases, they need to ensure that:

- the expenditure is justified
- the cost is competitive
- the transaction is properly documented
- there are sufficient funds to make the purchase

To ensure that an expenditure is justified, the manager should require that all purchases or agreements for payments, such as per diem amounts, are approved by the manager or another designated person in authority before any money is disbursed. To ensure that the cost is competitive, the manager can require that at least three suppliers (when available) were contacted in order to make price comparisons. To ensure that the transaction is properly documented, all cash receipts should be made on supplier stationery or, at a minimum, should list the item or service purchased with the cost and be signed by the individual who pays for the item or service and then signed (approved) by the manager. To ensure that there are sufficient funds to cover the purchase, the manager can check the reports generated by the financial manager or bookkeeper against the budget.

Many managers, whether at the national, regional, or local level, are responsible for managing cash. They may be responsible for petty cash fund, discretionary program funds, training funds, transportation, and small purchases.

Paper trail

How to organize a paper trail

The most important principle is to leave a "paper trail" at every level at which cash is dispersed (or collected). A manager at the national level could organize a paper trail for supervision of the Volunteer Health Sister program in the following manner:

1. Expected expenses for the program the upcoming quarter are disbursed by the Ministry to the Regional Health Administration. The Regional Health Administration signs for the funds on a numbered duplicate receipt. The receipt goes to the Regional Health Administration and the duplicate serves as the record of the disbursement.
2. The Regional Health Administration disburses program funds for the Volunteer Health Sister Program as needed to the MCH Regional Health Officer or possibly even directly to the Training Center for workshops, also issuing a receipt and keeping a record for the Regional Health Administration.
3. As the MCH Regional Health Officer disburses funds to the Trainer/Supervisors for supervisory transport costs or to the Training Center for preparation of a workshop, the recipient signs a record of the amount received.

4. The recipients collect receipts as they expend the funds (for purchase of workshop stationery, transportation, etc.). The recipients then return any funds not expended and the receipts for expenses over to the MCH Regional Health Officer. The MCH Regional Health Officer signs approval and issues a summary report along with all receipts to the Regional Health Administration. The financial manager of the Regional Health Administration totals the amounts, keeps a record of expenditures, and clears this with the central Ministry.

The flow of money can thus be traced from the original disbursement to its expenditure in the field.

Managing petty cash

Basic principles for managing petty cash

Most offices keep some "petty cash" for expenses that are very minor or that are not conveniently paid for by check, such as bus fares and small amounts of office supplies. The person responsible for managing the Volunteer Health Sister Program may be responsible for managing petty cash for the program, or may need to be familiar with using the organization's petty cash. Some basic principles guide an adequate petty cash system.

- Keep the cash in a locked metal box, which can be stored in a locked cabinet or desk drawer.
- Establish a set level for petty cash that is approximately equal to the amount of petty cash expenses expected in one month.
- Pre-printed numbered vouchers can be used to fill out and approve each time cash is withdrawn from petty cash. Vouchers should have the following information: date, person receiving the money, amount, explanation of type of expense, budget category, and a space for the signature of the person receiving the money and of the person approving the payment.

At the end of the month, the vouchers are added up. The total of the vouchers plus the amount of cash left in the box should equal the established petty cash level. All petty cash transactions should be recorded by the bookkeeper.

Financial monitoring: comparing actual results with budget projections

How to use a financial report

The program manager should be familiar with monitoring finances, or comparing the actual revenues and expenses with those projected in the budget. This is crucial because immediate action is required when revenue is lower or expenses are higher than projected in the budget.

The program manager needs to work as a team with the financial manager to project expenses and revenues during the planning process and to regularly compare actual revenues and expenses with projections as the program is implemented.

Exhibit 13.3

Sample Petty Cash Voucher

Petty Cash Voucher Voucher No. T16521

Date: ____________

Paid to: ____

Amount: ____________________

Budget Category	Explanation	Amount
____________	____________________________________	____________
____________	____________________________________	____________
____________	____________________________________	____________

Approved by: ____

I have received the above amount: __________________________

The financial report which follows shows how much was budgeted for the regional VHS Program by category, how much was expended this quarter, how much has been expended this year in total, and the balance remaining by category.

This financial report shows that the program has expended over two-thirds of the budget in the first half of the year. The VHS Program Manager, in this case, may not be worried about running out of funds because he knows that the large amount of money spent for VHS supplies was for procurement of the entire year's supply of VHS kits. There are few other expenses expected in this category for the rest of the year. The manager understands the low spending in the category of supervision because the VHS Program has only recently started. Local supervisors have not yet been recruited, and the first regional level assessment will take place in July. The expenses for training are reasonable because one Training of Trainers workshop has been conducted; two more will be held—one in July, one in October.

If the VHS Program manager realizes that the high expenses to date will result in a lack of funds later in the year (for example, if supplies had cost significantly more than anticipated), the manager will have to reduce expenses or try to increase revenues.

Exhibit 13.4

Sample Quarterly Report

VHS Program: Quarterly Report for Region, April-June 1996
Budget versus Actual Expenses

	Budgeted	2nd Quarter Expenditures	Total Expenditures to Date	Balance Remaining
Training	$ 4,700	$ 1,200	$ 1,800	$ 2,900
Supervision	800	0	0	800
Equipment and Supplies	23,696	15,104	19,000	4,696
Contingency	4,000	239	350	3,650
Total:	$ 33,196	$ 16,543	$ 21,150	$ 12,046

Understanding and using financial reports

Financial reports are the main product of the financial information system, and are therefore crucial for monitoring the program. Ideally, the system will produce information that allows one to determine the cost of establishing and running the program and make some cost-effectiveness analyses. For example, cost information can be useful for determining how much it costs to train a Volunteer during the program start-up phase versus during later phases of implementation. It can be useful for determining which regions run more cost-effective programs. Equipped with this information, the manager is better able to make decisions for the future.

Meeting donor and institutional requirements

Balancing the information needs of the VHS Program and donors

Donors supporting the Volunteer Health Sister Program often have reporting requirements that are different from those of the implementing organization. A flexible system is needed to satisfy the requirements of the donor as well as one's own organization without additional time and effort. It is important to be aware of what financial information is needed internally as well as by the funding institution.

If there is significant variation in content or format it is helpful to negotiate with donors or to sort financial information differently (for example, monthly rather than quarterly or by more detailed cost categories, such as office supplies, photocopying, etc., rather than a general category of "Administrative Expenses"). This way, information can be specific or aggregated depending on the different internal and donor requirements.

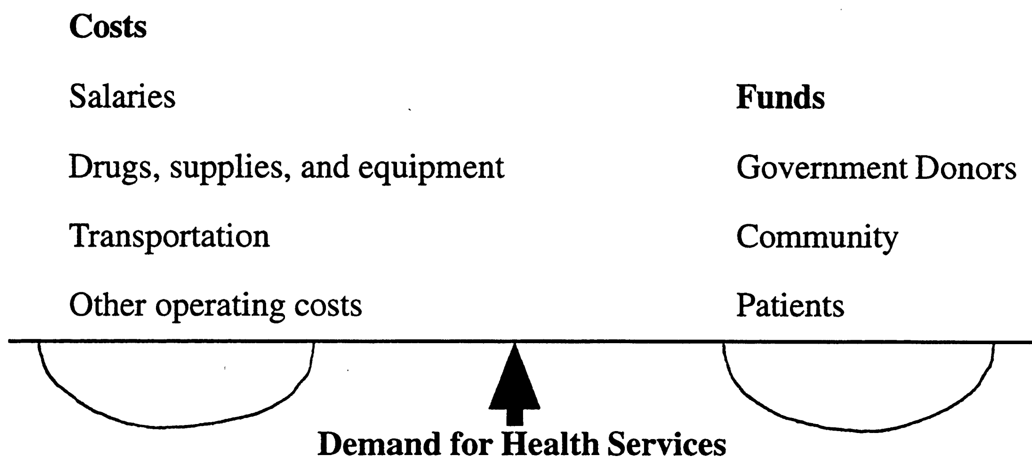
Planning for sustainability

Like other components of the primary health care system, the Volunteer Health Sister Program should aim to be sustainable. Sustainability can be defined as the ability of the program to provide quality services to the community and to expand its services and coverage while decreasing its dependence on funding from external sources. Sustainable programs increasingly rely on income generated from the program and through local funding sources. .

Financial sustainability means that the costs of the program are balanced by the funds (or in kind contributions) necessary to run the program.

Exhibit 13.5

Financial Sustainability Scale



There are at least 3 ways in which the VHS Program can balance the scale so that the program can expand with quality services:

1. **Sale of VHS supplies.** ORS, delivery packets, soap, paracetamol, iron tablets, etc., could be sold to the Volunteers' clients. The sale of drugs is often acceptable because people see drugs as tangible items that will improve their health.
2. **Incentives for services.** The VHS Program is based on the volunteer concept, so it is understood that the VHS is not a paid staff member of the health team. However, to show that her services have a value, the traditional system of giving a gift of a chadre or chicken to a Volunteer who has travelled several kilometers to see a sick child is entirely appropriate. Incentives for curative services are not uncommon, but

they are not generally provided for preventive services like health education even though preventive services are extremely important.

3. **Community grants.** As mentioned in earlier chapters, the local VHS Supervisor has specific supervisory tasks which must be carried out on a regular basis. For this reason, it is recommended that she receive some form of compensation. If the government cannot afford to pay local Supervisors, the community can contribute directly with a community fund which pays the Supervisors, or provides them with a regular supply of food. The community can support the supervisory costs by providing a service, such as transportation to and from different households in the Volunteer's catchment area.

4. **"Targeted cross-subsidies" from curative services.** In a district where clinics are charging patients for services, it is possible to use some of the revenue generated from curative clinic services to pay for the Volunteer Health Sister Program expenses.

It is important to remember that sustainable programs cover the cost of services for the poor and underserved, the group which the VHS Program often targets. Sustainable volunteer programs provide quality services to those who cannot contribute to the program as well as to those who can. One of the best ways to accomplish this is to maximize dependable sources of support from the government, donors, community, and patients.

Exercise

Exercise 1

Developing a Budget

Small Group Exercise

Directions: Divide into groups of 3 to 5. Write some estimated unit cost figures (e.g., Supervisor salary/year, VHS kit or kit content costs, per diem rates) on the board or on a handout for participants to use to prepare a budget. Each group should then develop a budget based on the following situation. Ask 1 or 2 groups to present their budget and show how they calculated costs.

Situation: You are the MCH program manager working for a non-governmental organization. You understand that a major donor is interested in supporting several NGOs to establish Volunteer Health Sister Programs. Your NGO works in 4

Continued

Continued

provinces and you have already put together a proposal and work plan to start the program at 4 sites within each province. The donor would like a detailed budget for the next year, although they plan to continue support for at least 3 years.

Prepare a rough budget for the program, using any cost figures which are available. Estimate individual costs for which you do not have figures. Be able to show others how you calculated your costs.

Time: 2 hours (1 hour and 30 minutes for developing a budget, 30 minutes for presentations)

Materials: Chalkboard and chalk or handouts with a list of standard costs for calculating individual budget line items, flip chart paper, markers

Part II

CHAPTER 14

Introduction to the Curriculum

Part II presents the seven modules upon which the Volunteer Health Sister Program is based. As mentioned earlier, the modules are:

- **Personal Hygiene and Environmental Sanitation**
- **Control of Diarrheal Diseases**
- **Immunization**
- **Nutrition**
- **Common Cold and Pneumonia**
- **Safe Motherhood**
- **Injury Prevention and First Aid**

Each module is organized into:

- **Learning Objectives**
- **Prime Health Messages**
- **Exercises**
- **Reference Pages**

The curriculum is a guide for the Trainer/Supervisor to use to teach the modules to the Volunteers. It uses simple words and short sentences because most of the Volunteers will not be literate and they will need to learn it all by memory and practice. The Volunteers will use the same prime messages and exercises to teach community women, except for certain tasks in the module on Injury Prevention and First Aid: the Volunteer Health Sisters should be expected to provide first aid or referrals, but they are not expected to teach first aid techniques to community women.

The curriculum does not rely on slide or overhead projectors or classroom equipment. The Trainer/Supervisor should use the exercises in the curriculum and materials readily found in a household setting so that Volunteers will be able to copy the methods.

As described in Chapter 6, "The Training System," the Trainer/Supervisor should also prepare a session training plan prior to teaching each module in order to sufficiently plan out the sequence and emphasis of subtopics, the time and materials required.

The curriculum is for Trainer/Supervisors to use, not for Volunteer Health Sisters who cannot read!

The **Learning Objectives** are the knowledge and skills that should be achieved to complete the module, as shown in Exhibit 14.1.

Exhibit 14.1

Sample Learning Objectives

"By the end of the session, the participant will be able to:

1. Teach the prime messages relating to nutrition to a Volunteer Health Sister, using a poster appropriately
2. Perform demonstrations associated with the prime messages and teach the Volunteer how to perform these demonstrations for mothers:

   Food hygiene

   Feeding a sick child

   Proper breast feeding
3. Give at least 3 reasons why breast feeding is valuable..."

Prime Health Messages are the key phrases, or concepts, which should be mastered for each module, such as those shown in Exhibit 14.2.

Exhibit 14.2

Sample Prime Health Messages

1. Feed your infant only breast milk starting immediately after birth and continue only breast milk for the first 4 to 6 months.
2. Begin additional supplementary food at 4 months of age but continue to breast feed until the child is 2 years old.
    a. Introduce new foods one at a time.
    b. Make the food soft by mashing or straining...
3. Practice the 4 Cleans (Clean hands, clean surface, clean instruments, clean coverings)...

Exercises are the suggested methods for reviewing the module. The exercises use active forms of adult learning. A sample exercise from the Nutrition module follows in Exhibit 14.3.

Exhibit 14.3

Sample Exercise

BREAST FEEDING BASICS

GROUP DISCUSSION

Directions:
a. Review basic facts about breast feeding in prime messages about nutrition and CDD.
b. Select 2 individuals to lead a discussion about breast feeding principles during and after illness, especially after diarrheal disease.

Time: 1 hour (30 minutes for part a, 30 minutes for part b)

Materials: Nutrition poster and control of diarrheal diseases flip chart

The **Reference Pages** for each module give additional information to help with teaching and answering any questions the Volunteer Health Sisters may have. The Trainer/Supervisor should read the reference pages for each module prior to teaching. The reference pages provide specific background information for emphasizing the key messages and for carrying out the exercises. The reference pages contain up to 4 sections, as shown in Exhibit 14.4.

Exhibit 14.4

Sample Reference Page

Introduction

This provides general information the topic, including traditional Afghan knowledge, attitudes, and practices. The trainer should ask the trainees about their local practices and beliefs which are relevant to the topic. The trainer should classify them into "good, bad, or harmless". Teaching should concentrate on explaining the dangers of bad practices.

Background information on main points

This information will help trainers understand the main points, especially if they do not have previous health or midwifery experience. This information is useful to know; it is not essential information. It should be used primarily to answer questions or add to the main points without overloading the trainees.

Islamic quotations

Quotations from the Holy Quran, Ahaadith, and other sources are useful to support the main points from the religious perspective.

Stories

Some modules have stories which are useful for clarifying new ideas. Use them to supplement Exercises or to review key points. The Volunteer Health Sisters can in turn tell these stories to their families and other women.

Principles of learning

The following adult learning principles apply to all trainees, whether they are literate or not. It is useful for the Master Trainers, Trainer/Supervisors, and Volunteer Health Sisters to practice them and to be examples to others.

Motivation

Students learn faster if they are interested and want to learn.

Social relationship

Students learn better if there is a good relationship and respect between teacher and student.

Physical Environment

The place in which you teach should be quiet and comfortable, with few distractions.

Clarity

Lessons should be spoken clearly, slowly, and in a language understood by the students. Lessons can also be improved by using visual aids.

Relevance to previous experience and future practice

People learn faster and are more interested if the new information is related to what they already know and to what they are expected to do.

Structure

Students learn faster if the lesson is presented in a structured, ordered way. This is especially true for illiterate trainees because structure helps memory. An ordered curriculum with clear objectives, clear health messages, and organized exercises will provide a clear structure.

Active learning

Active participation in solving problems and practicing skills makes learning faster and longer lasting.

Speed

The speed of learning must be adjusted to the ability of the group.

Repetition

Illiterate students are almost totally dependent on memory, so learning must be reinforced by repetition.

Feedback and evaluation

Feedback and evaluation enable both the student and trainer to know when the subject material has been mastered.

Encourage questions. No question should be considered stupid!

Teaching methods

The art of teaching is the most important skill the Trainer/Supervisor can learn. A good teacher is not someone who puts ideas into other people's heads, but is someone who helps others build on their own ideas, to make new discoveries for themselves. Although many of the women in the community may be illiterate, they can learn effectively if appropriate teaching methods are used and if durable teaching aids are available so they can pass on visual information to others.

Using a variety of teaching methods to promote the prime health messages and their associated skills makes learning more enjoyable and more effective. Practicing is the best method.

Research shows that most people memorize:

10% of what they read
10% of what they hear
50% of what they see and hear
90% of what they do (practice)

The Volunteer Health Sister curriculum emphasizes a variety of methods, including:

Role play

In role plays, the Supervisor/Trainer and/or the Health Sisters take on roles as actors or actresses to portray a situation that will clarify the challenges faced in program implementation. Role plays can demonstrate how to influence health attitudes and behavior. This is a very effective method, but it is important to limit role plays to the acting of the key points and to keep within time limits; since they are entertaining, sometimes the participants continue beyond the key points. It is also important that no interruptions be allowed once the role play has begun.

Story telling

Stories are a good way of teaching and assessing, especially for non-literate participants, because everyone can tell them and retell them. The Supervisor/Trainer and Health Sisters can add to the stories included in the curriculum.

Demonstration

Demonstrations are situations in which a practical skill is carried out in front of the group. A verbal explanation of what is being done should accompany the demonstration. Demonstrations are essential for the Volunteer Health Sister to actually practice treatments, such as preparation of ORS, or treatment of a burn, bleeding, or broken bones.

Question and answer

Question and answer promotes an exchange between the Supervisor/Trainer and participant so that the trainer understands the views and knowledge of the Health Sister and the Health Sister understands the trainer's reasons for advocating certain health practices.

Discussion

Discussion enables students, and the trainer, to learn from each other's experience. It is more likely than a lecture to lead to a change in behavior. To involve all participants, the trainer can encourage those who are quiet to speak up, especially if there are dominant members of the group who do most of the talking.

Lecture

Giving a lecture is a method in which the trainer explains and the trainee listens. It has limited use in teaching Volunteer Health Sisters, but it is useful method to relay key technical points in a rapid, concise way.

Visual aids

Learning is achieved even more readily when different senses are employed: for example, when verbal instructions are reinforced by visual images like posters, flip charts, dolls, and the body. This is especially true for non-literate participants who cannot refer to written notes. The curriculum has several exercises in which the participants can create their own visual aids.

CHAPTER 15

Personal Hygiene and Environmental Sanitation Module

Learning Objectives

By the end of this session, the participant will be able to:

1. Teach the prime messages relating to Personal Hygiene and Environmental Sanitation to a Volunteer Health Sister (VHS) who can then teach the same messages to community women
2. Perform the demonstrations listed below relating to personal hygiene or environmental practices to reinforce key concepts. VHSs will then use the demonstrations in household discussion groups:

Hand washing	Teeth brushing
Nail clipping	Boiling water
Garbage disposal	Food washing
Courtyard cleaning	(Children's latrine construction)

3. Explain in simple language to a VHS the link between good hygiene and sanitation/cleanliness and disease prevention
4. Name at least 5 actions a person can take to improve his/her:
    a. personal hygiene
    b. household environmental sanitation
    c. food hygiene

    and explain why or how these actions can prevent disease
5. Practice good personal hygiene and household environmental sanitation to provide a good example for others in the village

Prime Health Messages

1. Much sickness is caused by "**germs**" which are too small for us to see.
2. Germs can be killed by washing with **soap** and water.
3. You can protect your child and your family from sickness by keeping your bodies, clothes, bedding, and household clean. Make them clean by washing with soap and water. Keep your courtyard, and other places where children play, clean. Practice the "**4 cleans**": **clean** hands, **clean** surfaces, **clean** instruments, **clean** coverings, **nothing dirty**.
4. Clean fruits and vegetables that you eat uncooked by washing with water, and if possible, also with soap.
5. Although germs are everywhere, most cannot make you sick unless they get inside your body through natural openings like your mouth or nose, or through unnatural openings like cuts in your skin. That is why it is important to keep all parts of your body clean and free of germs by washing often with soap and water.
6. Germs especially like to live in dirty things or places. You should practice behaviors that help you avoid contact with dirty things or places. Remember these 6 ways which germs travel: **feces, feeding bottles, flies, fingers, food, fluids**—the routes which many germs travel to bring you sickness. Practice the "cleans" and be a good example for others in your town. Avoid the 6 routes which germs travel!

Exercises

Exercise 1

Preventive Personal Hygiene and Sanitation

Demonstration and Role Play

Directions:

a. Divide the group into groups of 3 each. Organize small group role plays as outlined below. Each group will first role play each of the 3 demonstrations. While demonstrating, be sure to include associated prime messages. Alternate roles for each practice so that each person will have a chance to play all 3 roles, but each in a different exercise. At the end of each exercise the observer should give a critique of the method and content of the demonstration as well as the overall interaction.

b. After small group role plays are complete, return to the large group. Each small group will perform 1 of their demonstrations in front of the entire group. The observer and the general audience will provide a critique after each demonstration.

Roles: 1 Trainer/Supervisor, 1 Volunteer Health Sister, 1 Observer

Situation: Each group will choose 3 demonstrations to practice from the following: hand washing, garbage disposal, teeth brushing, food washing, nail clipping, courtyard cleaning, boiling water.

Time:

a. 1 hour and 15 minutes (Allow 25 minutes for each small group to do the role play and critique the interaction. Three role plays will take 1 hour, 15 min.)

b. 1 hour, 15 minutes

Materials: Soap, water, water jug, tooth brush, cooking pot/kettle, fruits or vegetables, garbage pail, personal hygiene and environmental sanitation poster

Exercise 2

Link Between Hygiene and Disease Prevention

Demonstration and Case Study, Picture Story

Directions:

a. In a large group—(1) Put a pinch of salt into a glass of water, stir it until it dissolves, and ask a VHS to look at it. Explain that the salt is like microbes; we are unable to see them in water, food, or air, but they are there. (2) Choose someone to wash her hands with soap in some water, then pour it into a glass. Compare this with a glass of clean water. Ask the VHSs which one is clean. Explain that the dirt from our hands carries "germs" (microbes) which can travel to anything we touch: food, etc.! (Alternatively, if it is difficult to find a glass, depending upon where discussion group takes place, you can wipe someone's apparently clean hand with a white cloth, and show the resultant dirt—give the same explanation.)

b. Read the story about Hassan's family and the spread of diseases in the Personal Hygiene and Environmental Sanitation reference pages at the end of this module. Discuss the questions at the end of the story.

Time:

a. 15 minutes (for demonstration 1 and 2)

b. 20 minutes

Materials: Glass of water, salt, soap, story of Hassan's family

Exercise 3

The "4 Cleans"

Question and Answer Discussion With Pictures

Directions: Using prime health messages #3 and #6, discuss specific disease prevention actions which the VHS can practice and teach to mothers. Discuss examples to improve personal hygiene, sanitation, and food hygiene. Note particular problems in your village. Do you need additional information in any area, such as children's latrines? For each action, discuss how it breaks the transmission of disease. Draw simple pictures of ways to practice the "**4 cleans**" on a large piece of paper (or in the dirt with a stick if you are in a village setting). Then draw pictures of the "**6 routes which germs travel**".

Time: 30 minutes

Materials: Paper, marker

EXERCISE 4

LIVING WHAT YOU TEACH

DISCUSSION WITH PICTURES

Directions: Each person should list 3 ways she can be a living example of the prime personal hygiene and sanitation health messages. Draw a picture to make a "living example" list, with each person giving one example from his personal list. If a VHS does not live as she teaches, what will be the effect on her credibility? What will be the effect if she is a "living example" and practices the health behaviors which she teaches others about? (The same is true for all health providers!! How many of your children are immunized?)

Time: 20 minutes

Materials: Paper, marker

Reference Pages

Personal hygiene

Microbes are tiny animals which can be seen only with a microscope after staining them with special dyes. Under the microscope, the TB microbe looks like red rods. Many Afghans believe that an invisible worm (shinjay) decays their teeth, so use this example to explain that microbes cause sickness and attack people when they are weak (young children, pregnant women, thin people). In this module the VHS will learn to how to prevent disease by making people stronger (good diet, vaccinations, clinic visits) and by reducing the spread of microbes in the community through clean practices (hand washing, latrines, rubbish disposal, clean wells, covering skin wounds).

Explain how diseases are spread by feces, feeding bottles, flies, fingers, food, and fluids. Explain the importance of hand washing with soap and water at certain times. Soap and water are friends; food and fluids can be clean or dirty. Although Muslims wash 5 times a day, soap is not always used and it is soap that kills the microbes on the hands. The mother uses her hands all the time for preparing food and feeding the children, and if she does not wash her hands at these important times, she will be the main source of sickness within her family. The VHS must explain to the mothers that they have a big responsibility to keep themselves clean for the health of their whole family.

The Protections against sickness are:

Cleanliness

Good diet

Vaccinations

Clinic visits

Referral of danger signs

Get the VHSs to remember these protections using the fingers of one hand. Explain that these protection are like a helping hand (5 fingers) to keep women and children safe on the dangerous journey through pregnancy, delivery, and the first 2 years of life.

Following these messages will mean changing many traditional customs. This can be very difficult to do. In this training course, your objectives are to improve the knowledge and the practices of the VHSs and their community. To help with this you can do the following:

1. Understand their traditional knowledge, beliefs, and practices.
2. Use this information when teaching each topic. For example, you know the VHSs believe that jinn cause sickness, so use this to explain that microbes are like jinn. You know that they use tawiz to protect against sickness, so explain that vaccinations are like tawiz. Using examples familiar to them will make the health messages easy for them to understand. Think of your own teachers in the past, and the skills of the ones that changed your knowledge, attitudes, and practices. Try to use the same skills.

3. Keep repeating these simple messages in every session. Tell stories and use role plays with characters from the community to make these health messages relevant to their own life experience.
4. Ask the VHSs about their home visits to see if they are using this new knowledge in their work with the community.
5. Set a good example yourself of healthy living (clean clothes and hands and short nails) and check to see if the VHSs are doing the same. Explain to the VHSs that they have to set a good example for their community so that people will imitate them. Remember that students imitate teachers they respect.

Environmental sanitation

The kinds of houses in which people live affect their health. Good, clean houses protect health. Bad, dirty houses may damage health. The women are the center of the household and their actions decide what type of house—a good, clean one or a bad, dirty one—their family lives in. The women are responsible for fetching and storing water, washing clothes and cooking utensils, preparing food, cleaning the house, and teaching the children about clean habits. The men traditionally have very little to do with the household things except construction and improvement of latrines and wells.

The VHSs are the health workers most likely to have a positive effect on the cleanliness of households because of their access to and influence on other women. Try to visit all the VHSs' houses during the initial training. This visit should be partly social and partly to help you understand the standards of cleanliness in different households. During the initial training, you can encourage VHSs to change the bad practices in their own households.

Remember, diseases are spread by:

- Feces
- Feeding bottles
- Flies
- Fingers
- Food
- Fluid

Traditional Afghan practices concerning water and sanitation

Women are responsible for collecting and storing water. In rural Afghanistan, the women often go outside the house to collect water, but in the stricter purdah system of the refugee camps, the men and children often collect the water. Water is usually collected in the early morning before it has been stirred up by the animals and people washing. Its is stored in large clay pots (matka) with lids which

keep the water quite cool, in goatskins, or in plastic containers. Often a mud shade is made to cover the water containers and raise them off the ground.

Water is thought to be either sweet or bitter, and Afghans try very hard to obtain sweet, clear water. They may filter it or allow it to settle. Clear water is thought to be safe for children to drink. Boiled water is used as a humoral treatment in some illnesses to restore balance to the system. According to the Ahaadith, any sort of free running water is considered safe and should be protected. There is great religious merit (sawab) attached to sharing drinking water with everybody.

Women are also responsible for washing clothes and cooking utensils. Dirt, sand, or ashes may be used as an abrasive for cleaning dishes. Some communities do not allow people to use water sources for washing clothes. After being washed with soap, clothes are hung on bushes or laid on the ground to dry. Very few bathrooms have cement floors. Most have mud floors with a drain, and people bathing throw water over themselves with a small container. Friday is the traditional bath day. Soap is available in the bazaar shops and is mainly used for washing clothes. Water, but not usually soap, is used for the ritual hand washing before a meal. The boys are responsible for bringing the hand washing bowl and jug to each person before a meal.

In most households, waste water is just thrown on the ground, resulting in stagnant pools of water. Most houses do not have drains leading out of the compound. Rubbish is thrown in a corner of the compound or out in the street. It may be collected together in open piles. Rubbish tends to block drains.

The custom is for women to pass stools inside the compound in a special area once a day or to go outside once a day. This is usually after dark to observe purdah. The men go outside. Stools which dry up in the fields away from the house are considered safe. Stones, earth, and water available nearby are used for washing after passing stools. Even when a latrine is constructed, the women may use it while the men still go outside. Latrines are private, they allow women to observe purdah; and they are convenient and free of smell. Some people say that stools, if not cleaned from the body, can attract jinn which then catch people and make them sick.

Women are responsible for teaching hygienic practices to children. They start toilet training children at 2 to 3 years of age. Before this, children wear only a chemise and are free to pass stools or urine anywhere. The women clean up afterwards. Women start taking children to the latrine or outside the compound when they are 2 to 3 years old.

Animal stools are not considered as dangerous as human stools. The women make them up into dung cakes, dry them on walls, and then burn them as fuel. Some animal stools are used as traditional treatments. People should be encouraged to build animal quarters away from human living areas.

Food protection

The VHSs should explain that all foods must be treated with respect by protecting them from microbes, insects (especially flies), animals, stools, sun, and wind. Food must be protected during all stages of production, storage, preparation, and eating in the following ways:

- **Clean hands** before slaughtering animals, handling, preparing, or eating food; always wash hands with soap and water.
- **Clean surfaces** for slaughtering, storing, preparing, and eating food; use a clean table, clean cutting board, plates, cups, spoons, and table cloths.
- **Clean instruments for cutting.** For slaughtering, cutting, and eating, use clean knives.
- **Clean coverings.** Cover food with a lid or clean cloth and store in a safe place, above the ground and away from animals, insects, and children with dirty hands.
- **Nothing dirty** should be allowed to touch food, such as flies, rubbish, or stools. For growing vegetables, use human or animal fertilizer only if it is more than 6 months old.

The community can take action to check that the animals used for food production are healthy. Cows' udders should be cleaned before milking and any udder infections should be treated. All the areas for slaughtering animals should be fenced off and kept clean. Diseased parts of slaughtered animals should be burned or buried and not given to dogs. The slaughterers and shops selling food can be regularly checked for **the cleans.**

All food should be eaten soon after cooking, especially meat, poultry, and fish. If food is stored for some time before eating, especially in hot weather, microbes have a chance to grow in it and start making poisons. These food poisons can make a person very sick, causing severe abdominal pain, diarrhea, and vomiting. Raw fruit and vegetables should be washed carefully before eating to remove dirt and fertilizer. Food, and especially meat, should be boiled for at least 20 minutes. Pressure cooking, which is a traditional Afghan method of cooking meat, is very efficient.

Water protection

A community that takes action to protect its water supply will have fewer sicknesses such as diarrhea, polio, and hepatitis (jaundice).

Ask the VHSs where they get their water. When you visit their houses, check wells and water storage facilities.

Water must be protected during collection, storage, and use (such as drinking, cooking, bathing, or cleaning clothes and wounds). It can be protected with:

- **Clean Surfaces.** Water from a well should be collected in a clean bucket which is not allowed to touch the ground. The surroundings of the well should be made of cement with a drain to prevent stagnant pools. Get VHS to look at a good well and a bad one and discuss the differences. Cement is expensive. Water should be stored in clean containers. Cups, glasses, and spoons used for drinking water should all be clean.

- **Nothing dirty** should be allowed to touch water. Wells should have a tightly fitting lid which is always replaced after drawing water. All water containers should be covered with a lid or clean cloth. People should not pass stools near any water source (**see Islamic Quotes**). Water from a river or canal should be drawn upstream of animals and people washing. Water from these sources is cleanest late at night or in the early morning. Use a model, picture, or flannel graph of a river and these different activities to make a game of deciding where the water should be collected.

Water for drinking from any other source, such as a river, pond, or irrigation canal, is very difficult to protect, and so should first be treated before it is drunk. This treatment is especially important to protect small children. Ask the VHSs if they protect water in a special way for children or at times when there is a lot of diarrhea in an area. Water from unprotected sources must be boiled, especially for babies and children.

Rubbish disposal

Every household produces rubbish. If it is left lying around it will begin to smell and attract flies, mosquitoes, and rats. Young children will crawl in it and hurt themselves on the old tins and broken glass. Rubbish can blow all over the place and contaminate food and water. It can also block drains and cause them to flood. Rubbish should be safely disposed of every day, especially in hot weather.

Families can collect all their rubbish together in one area of the compound, away from the kitchen and well fenced off from the children and animals. They can separate out any fruit peel or vegetables. These can be given to animals or combined with soil in a compost heap and used later as fertilizer for the vegetable garden. Each family can dig a pit, throw the rubbish in it, and then burn it once a day. Rubbish which cannot be burned should be covered with a layer of earth once a day to prevent it blowing away or attracting flies. When a hole has been filled up, another hole can be dug and the whole process started again.

Some villages may have a community pit or rubbish dump away from the houses and the rubbish from the house can be collected in a container and taken there. These community pits have to be well looked after, in the way described above; otherwise they can become a danger to health. The community must take action to protect these rubbish dumps by getting somebody to check that the rubbish is being burned and then covered with earth.

Remember, burn and bury all rubbish in a safe place.

People who have diarrhea, worms, polio, or hepatitis can pass these diseases on through their stools. Every stool contains thousands of microbes and is dangerous. If food or water are contaminated by these stools, through direct contact or via flies and dirty hands, they can spread these diseases to other people.

Ask the VHSs which places their communities use to pass stools and how their habits might cause the spread of these diseases. Ask them how these diseases can be prevented.

The answer is to put all stools in a deep covered pit where people, flies, animals, birds and water cannot touch them. To do this, every family should have and use a pit latrine and the latrine should be placed away from any water sources.

If some people in the community are still passing stools above the ground and not in a pit latrine, these diseases will not be controlled. A latrine must be used properly if these diseases are to be prevented. A latrine is used properly if:

- The whole family, including the small children, uses the latrine for passing stools and urine.
- It is cleaned daily. A container of water and a brush should be left in the latrine and this should be used for cleaning the latrine and for nothing else. There should also be soap and water for washing hands after using the latrine. Adults should wash the hands of children.
- The latrine lid is placed back over the hole after use.
- The door is covered with a curtain so that the room is dark and therefore less likely to attract flies. The latrine should have a pipe with a fly mesh on top for getting rid of smells and catching flies.
- When the pit is full, a new pit is dug.

Take VHSs to look at some latrines or show them the poster and point out the lid, curtain, pipe, and mesh. Discuss where to place a latrine in relation to the kitchen, well, and river.

If a family does not have a latrine, they can ask the clinic staff about having one constructed in their house. Otherwise, they must make a special area for passing stools in the compound or outside away from water, paths, or places where many people walk (**see Islamic Quotes**). They should cover stools with earth. It is also good to have latrines in public buildings like schools.

Remember, always wash hands with soap and water after passing stools.

Islamic quotations

- *There is no bigger sin than neglecting your dependents. Protecting your children and women from disease will save you from doom on The Day of Judgement.* **Hadith Sharif.**
- *God likes cleanliness. This is why he orders us to wash almost half of our body 5 times a day.*
- *The cutting of nails is a trait of Fitrat.* **Hadith Ibn Imran**. *The Prophet (PBUH) cut his nails every Friday before Jumma prayers.*
- *Among the good deeds was removing the dirt from the streets. Among the bad deeds was spitting in the mosque*. **Hadith Sharif.**
- *The Prophet (PBUH) advised people to avoid passing stools on paths where people walk, in shaded areas where people rest, or near water sources.* **Narrated by Abu Haraira.**

- *The Prophet (PBUH) forbade urinating in stagnant or running water.* **Narrated by Jabir**
- *The Prophet asked his followers to keep their house and surroundings clean.*
- *Cleanliness on the outside reflects cleanliness on the inside.*

Story about Hassan's family and the spread of diseases

This is a story about Hassan and his family, who were sick with diarrhea.

Hassan tries to keep his family happy and healthy by working very hard at his job so that he can earn enough money to support them. Hassan's neighbor does not have a latrine and his children often pass stools outside Hassan's house. Hassan has noticed that the neighbor's children always have diarrhea. A fly lands on a stool passed by one of the neighbor's children who has diarrhea and then flies into Hassan's house and lands on the food that has been prepared by Hassan's wife for the evening meal. The fly has hairy feet which pick up dirty things like stools. When it lands on the food with these hairy feet the food in Hassan's house also becomes contaminated with stool. This is like coming in from the street with our shoes covered in mud. We take our shoes off when we go into a house but a fly does not.

Hassan comes home from work and is very hungry. The whole family sit down to eat the meal. There is very little water left in the container and Hassan did not have time to buy soap on his way home from work, so the family do not wash their hands. They enjoy their meal very much and after drinking tea and listening to the radio, the family goes to sleep.

In the middle of the Hassan and 2 of the children wake up with severe pains in the stomach and diarrhea. Hassan remains sick and cannot go to work for the next few days. His boss is not very happy with him and tells Hassan that if he gets sick again he will lose his job. Hassan lies on his sick bed thinking about what the VHS, Kala Jan, has told him about the cause of his diarrhea. He decides to take action so that his family will not get sick again.

Ask the VHSs what Hassan should decide to do to prevent his family getting sick with diarrhea again (cover food, have enough soap and water in the house, wash hands before eating, advise neighbor to build a latrine or get family to pass stools in a safe place, cut nails on Friday, etc.).

The story of Abdullah and his health committee

The community were all very happy with their new group leader, Abdullah, who was very active. They all remember how, when he first became group leader, he used to visit people and ask them what sort of problems they had in the community. Abdullah soon realized that people were mainly concerned about their children's poor health and blamed the lack of cleanliness in the community.

He decided to form a health committee to solve this problem. The committee consisted of the local mullah who was also a traditional healer, the schoolteacher, a shopkeeper, 3 elders and Abdullah himself. The first thing the committee decided to do was to send a man and a woman away to be trained as community health workers. They had heard that the program had worked well in other areas, and they felt the community needed some experts. Abdul Karim and Kala Jan, who were both

liked and respected by the community, were chosen by the committee. The committee were very proud when they saw the kits and certificates which had been presented to their newly-trained MHW and VHS after training.

Abdul Karim and Kala Jan had lots of ideas for improving the health of their community. The health committee listened to them very carefully and then set to work. They decided to divide the community up into 4 areas and have a working group for each area consisting of one committee member and a group of school children and young men. The plan was to have one latrine in every house, one communal rubbish tip, and one improved well in each area.

They contacted the clinic staff about building the latrines and bought cement for improving the wells. They had the rubbish tip ready in no time, but soon noticed that people were not using it. Abdul Karim explained that the school children would have to encourage their own families to bring their rubbish and then other people would start using it. He asked Kala Jan if she could visit the women. "New ideas need a lot of selling before they catch on," explained Abdul Karim. "I know only too well with my business," replied the shopkeeper. "I once bought a whole stock of new hair oil and nobody would buy it at first. Then I told the young boys it would make their beards grow if they rubbed it into their chins and the whole lot was sold in one day!" The shopkeeper later went off to check the rubbish tip to see if it was being used properly and was pleased to see the community were doing the right thing by burning the rubbish in the pit and then covering it with earth. "It looks as though the health committee hair oil is beginning to sell at last," he thought smiling to himself.

They then started to improve the wells.

Ask the VHSs what can be done to improve wells.

They surrounded the well with a cement floor and drain, attached a bucket so that it could hang inside the well when not in use, and fitted a lid. One of the boys spent the first week standing by the well to show people how to use it properly.

The latrines proved to be more of a problem. Although the families were very happy to build them, some men and children still went outside to pass stools. The health committee discussed this with the families and explained that they had a responsibility to the health of others in the community. Kala Jan spoke to the women. The mullah talked about the health committee program during Friday prayers. The schoolteacher discussed it in the school and the shopkeeper mentioned it to his customers.

The health committee announced that they would give a prize of a sand filter to the area with the best-kept rubbish tip, well, and latrines. Everybody had heard about these marvelous sand filters and how sweet and clean they made the water. The whole community worked hard to get their area ready. When the time came for the committee to judge the different areas they could not decide which area was best. They were all so good that they decided to give money to all 4 areas for the materials needed to build a sand filter and train one person in each area how to make it. Abdul Karim explained: "If you give a man a fish, you feed him for a day. If you teach a man to fish, you feed him for life." They all agreed.

The following year the clinic staff called the health committee to the clinic and showed them a graph of the number of latrines that had been constructed over the last year. "Congratulations. Your health committee has helped us reach our target 2 months ahead of time. Every house now has a latrine and our field staff tell us that they are used properly. We wondered if you would be interested in helping us with this year's target?" the medical officer asked. The committee looked interested and waited for him to continue. "We want to have all the children under 2 years of age vaccinated by this time next year. Do you think you can help?" "We would be delighted to help. Just tell Abdul Karim and Kala Jan what needs doing and we will make sure the community supports them," said Abdullah. "By the way," the medical officer said to the shopkeeper, "do you have any more of the excellent hair oil you used to sell?"

Ask the VHSs about the health committee activities they have heard about in the community. Ask them to discuss the work of the health committee with their husbands.

CHAPTER 16

Control of Diarrheal Diseases (CDD) Module

LEARNING OBJECTIVES

By the end of this session, the participant will be able to:

1. Teach the prime messages related to the prevention and treatment of diarrheal diseases to a VHS, appropriately using the CDD flip chart
2. Describe in simple language for a VHS, at least 3 actions which people can take to prevent diarrheal disease in themselves or children, and explain how or why those actions prevent diarrhea
3. Explain to a VHS what diarrhea is and why it is dangerous, especially in a baby or young child
4. Describe to a VHS at least 3 actions which a person can do to begin immediate treatment of diarrhea at home
5. Demonstrate to a VHS how to make ORS and then teach the VHS how to perform this demonstration herself (marking the container and using the correct amount of water per ORS packet size)
6. Demonstrate to a VHS how to feed a sick child using ORS or home fluids and teach the VHS how to perform this demonstration for another
7. Explain in simple language what dehydration is and how to recognize the signs and symptoms of dehydration which require immediate referral to the nearest qualified health provider
8. Teach the VHS to recognize the signs and symptoms during diarrhea which require immediate referral to the nearest qualified health provider
9. Teach the VHS the specific information and actions required to make a successful referral
10. Teach the VHS how to make cereal ORS and how to teach a mother to do so (**Optional:** This may be added to the module)

PRIME HEALTH MESSAGES

1. Most diarrhea is caused by "**germs**". Six actions you can do to prevent diarrhea are:
   a. Hand wash
   b. Breast feed
   c. Drink safe water
   d. Cover food
   e. Keep household and courtyard clean
   f. Immunize
2. **Diarrhea** refers to abnormally loose stool (it may be watery, may have blood or mucus, or be mixed), in which there are MORE THAN 3 loose movements in a 24 hour period (or more than 5 in a breast feeding infant).
3. If your infant or child has diarrhea, you should:
   a. Continue **breast feeding,** but **increase** the **frequency** of breast feeding during and after diarrhea for 2 weeks
   b. Continue **feeding** a child **during** diarrhea
   c. Give **more fluids**
   d. Start **home fluids** or ORS
   e. Only give medicines prescribed by the clinic
4. The main danger from diarrhea is the loss of too much fluid from your body, called **dehydration.**
5. To replace the fluid lost during diarrhea, you should start giving extra fluids as soon as your child has the first loose stool. Home fluids should always be given with a spoon and cup. They should be given in **small amounts** and **frequently.**
   a. Give 1 cup after every loose stool; give it slowly with a spoon.
   b. Give more if the child wants more.
   c. If the child vomits, wait 10 minutes, then give fluids again but more slowly, a teaspoon every 2-3 minutes.

6. If you notice that your child has increased thirst, a dry mouth, or is unusually irritable, start **oral rehydration salts** (ORS).
   a. Pour clean water into the ORS jug up to the liter line.
   b. Pour this liter of water into the container that the mother will use. Take your marker and make a line on the container.
   c. Show the parents the mark and explain that this is the amount of water needed for 1 packet of ORS. (**Note:** Make sure the ORS packets being distributed are for 1 liter of solution.)
   d. Empty 1 entire packet of ORS into the water and stir with a clean spoon until all of the ORS is **completely mixed.**
   e. Cover the container.
   f. Give ORS the same way as other home fluids, slowly and frequently using a cup and spoon.
   g. Make more as needed.
   h. Continue ORS until stool returns to normal.
7. After the diarrhea has ended, give an extra meal each day for 14 days (2 weeks). Offer smaller helpings more frequently, at least 6 times per day. Add a teaspoon of oil to each serving. The extra food is necessary to help the child gain back weight and strength.
8. Recognize the **danger signs of diarrhea:**
   a. Great **thirst**
   b. **Fever**
   c. **Eating or drinking poorly**
   d. **Blood** in the stool
   e. **Very frequent** stools (more than 10 in 24 hours)
   f. **Repeated vomiting**
   g. Child does **not get better** after several days or **gets worse**
9. Recognize the **danger signs of dehydration:**
   a. **No urine**
   b. Skin that stays **wrinkled** when pinched
   c. Very **weak**, extremely **tired**, or very **irritable** with **cool "clammy" skin**
   d. **Does not respond** to your talking or touching; seems to be in a deep sleep.
10. If your child has any of the danger signs of diarrhea or dehydration, **immediately take the child to the nearest clinic** or qualified **health provider**. Know exactly how to find the clinic and plan how you will transport your child to your provider quickly **before** the child gets sick!

EXERCISES

EXERCISE 1

ACTIONS TO PREVENT DIARRHEA CIRCLE

STORY TELLING WITH PICTURES

Directions: Each person will make a simple sketch depicting an action to prevent diarrhea, and another sketch showing an action to avoid. Arrange the group in a big circle. Mix up the pictures and have each person select 1 from the pile. Keep the pictures face down so when selecting, the person cannot see the picture in advance. (If someone selects their own picture, return the picture to the pile and have them select another.) Each person should describe the action and say whether it prevents or causes diarrhea, giving a few words of explanation as to how the action encourages or stops transmission of diarrheal disease. If the group is too large to allow everyone to speak, make 2 circles. Relate the story to the prime messages and to the diarrheal diseases flip chart.

Time: 40-60 minutes (depending on the size of the group)

Materials: Paper; markers, pens, pencils, or crayons; diarrheal diseases flip chart

EXERCISE 2

DEMONSTRATIONS: ORS, HOME FLUIDS, FEEDING SICK CHILD

PAIRED AND GROUP ROLE PLAY

Directions: Select 2 persons to role play the scene in front of the entire group. The group will observe and then critique. Then divide the large group into pairs to practice the same demonstrations. May conclude with large group summary and discussion.

Roles: 1 VHS, 1 mother with a child with diarrhea

Situation: The VHS demonstrates to a mother how to prepare and administer ORS, and gives the mother instructions about feeding the sick child.

Time: 45 minutes to 1 hour (25 minutes for large group role play and critique, 20 minutes for paired group role play, 15 minutes for summary and discussion)

Materials: VHS kit (or ORS packets, liter measures, a home-type measure, markers, and diarrheal diseases flip chart), spoon, water

EXERCISE 3

SIGNS AND SYMPTOMS OF DEHYDRATION

INDIVIDUAL PRACTICE STORY TELLING

Directions: Using prime message #9, discuss signs and symptoms of dehydration. Select 1 person to describe dehydration using the flower story or draining pot illustration described in the reference pages for this module.

Time: 20 minutes

Materials: Pictures of a blooming flower and a dried flower, or a plastic jug or pot with a hole in the bottom; water

EXERCISE 4

DANGER SIGNS AND SYMPTOMS REQUIRING REFERRAL

QUESTION AND ANSWER, SMALL AND LARGE GROUP ROLE PLAY

Directions: Ask the group to name danger signs and symptoms of diarrheal disease and dehydration which require immediate referral. List them on a flip chart. Break into groups of 4. Each small group should develop a scene which illustrates the key points from the prime messages #8 and #9 of this module on control of diarrheal diseases. Groups should use props to enhance the role plays. Half of the groups will do a "positive example" of a successful referral; half will do an example where a disaster results because the VHS did not know how to make a proper referral. Select 1 group to perform a "positive example" and 1 group to perform a "disastrous example" in front of the large group. Discuss in terms of the prime messages. Emphasize that the VHS should also teach her families to think about emergency transport before it is needed.

Roles: 1 VHS, 1 Mother, 1 Family Member, 1 Observer

Situation: The mother and an accompanying family member come to the VHS's home with a dehydrated child.

Time: 1 hour (15 minutes for dehydration demonstration, 15 minutes for small group role plays, 20 minutes for large group role plays, 10 minutes for discussion.

Materials: Flip chart paper, markers, plastic jug with hole and water or picture of wilting flower or a doll with signs of dehydration, control of diarrheal diseases flip chart

Reference Pages

Introduction

A person has diarrhea when the stools contain more water than normal. The stools become loose and watery. Even one watery stool is diarrhea. Stools may also contain blood, in which case the diarrhea is called dysentery. Babies who are breast fed often have stools which are soft. This is not diarrhea. Mothers know when their children have diarrhea. Diarrhea is very common in Afghan refugee children, especially in those between 6 months and 2 years old. A UNHCR survey showed that Afghan children in the refugee camps of the Northwest Frontier Province (NWFP) Pakistan, have an average of 5 episodes of diarrhea a year and in Baluchistan, Pakistan an average of 12 episodes of diarrhea a year. Almost half of the deaths in Afghan refugee children are related to diarrhea and most of these are in infants of under 1 year. The 2 main dangers of diarrhea are dehydration and malnutrition.

Traditional practices in the treatment of diarrhea

Diarrhea is very common in Afghan children. There are many beliefs concerning the different causes of diarrhea. Diarrhea is often thought to be caused by an excess of heat in the body from eating foods that have been out in hot weather. Failure of the stomach to digest food properly, either because inappropriate foods have been given or because of underlying weakness, seem to be considered another common cause of diarrhea. It is also thought that children get diarrhea because they cannot digest food as well as adults. Some believe the stomach is in the center of the body and connected to other parts of the body by veins. Some people also think that the fontanelle in infants is attached to the hard palate at the top of the mouth.

The following are some diarrhea types recognized by Afghans from southeastern Afghanistan: heat diarrhea, constipation diarrhea, indigestion diarrhea, teething diarrhea, fallen stomach vein diarrhea, hot wind diarrhea, cough and cold diarrhea, bloody diarrhea, spirit possession diarrhea, evil eye diarrhea, worm diarrhea, earache diarrhea, measles diarrhea, and sunken fontanelle diarrhea. All these different types of diarrhea have names and different treatments.

The commonest treatments for these different types of diarrhea are:

- Traditional medicines and home remedies
- Modern medicines from the bazaar
- Religious objects or prayers
- Physical actions or manipulations (such as keeping the child out of the sun and abdominal massage)

As diarrhea is commonly considered to be a “hot” condition, only foods, drinks, and medicines considered to be “cold” are used as treatments. These are thought to act by cooling and cleaning the stomach and improving thirst and weakness. Bananas, oranges, lemons, rice water, yogurt, and herbal mixtures are considered “cold” substances. Fats, eggs, chicken, and dahl are considered to be “hot”

and not suitable for diarrhea. Pregnancy is considered a hot condition and the breast milk of a pregnant woman is thought to sour because of this heat and be unfit for babies. It is also thought that a lactating mother may give her child diarrhea by eating certain foods.

Traditional dais treat sunken fontanelle (talo) diarrhea by pushing up the hard palate and applying sticky substances to the fontanelle.

The religious remedies include visiting the tombs of pirs (holy men), tawiz, and dam (blowing words from the Quran).

A UNHCR survey in Pakistan refugee camps found that half of children with diarrhea receive increased fluids and increased or unchanged food intake. One in ten are given traditional home fluids. The most popular of these home fluids are lugusticum, aniseed, gutti, barthang, and gur. These herbal mixtures are traditionally given like syrups in small amounts of 1 to 2 teaspoons 2 or 3 times a day. The therapeutic property is thought to come from the cooling effect of the herbs, rather than any fluid replacement. This is because thirst is believed to result from excess heat rather than fluid loss. Three in four children are given medicines from the bazaar to stop diarrhea. These are mainly syrups. In nearly all children breast feeding is continued. Seriously ill children are usually taken initially to a private practitioner for treatment rather than to the BHC. Parents usually start treatment after the diarrhea has lasted 1 to 2 days, if there are frequent stools and vomiting or if the child is weak or thirsty. Thirst is a recognized cause for offering a child more to drink. However, in a small child not able to articulate its desire for water, crying and irritability are not recognized as signs of thirst. Mothers must be taught to recognize irritability as an early sign of thirst so that they will offer more fluids to these children.

Give more fluids during diarrhea

Dehydration is caused by the body losing water in the stools. A child with vomiting, fever, or frequent watery stools will become dehydrated very quickly. Adults do not lose water as quickly as children and are therefore less likely to become dehydrated. The human body is like a plant and requires enough water to make it function properly. As **Surat XII (Anbiyaa)** verse 30 says: "We made from water every living thing." If the water lost in the diarrhea stools is not replaced quickly by giving fluids, a person becomes very sick from dehydration and may even die, just like a plant dying from lack of water. You can use a transparent container with a hole in the bottom to show how water in the body is lost in the stools. Show how to stop the level of water dropping too fast by pouring water in at the top. Explain that this is like giving a child home fluids and ORS to prevent the child drying up. A person with diarrhea should be treated with these extra fluids, an extra cup after each stool, as soon as diarrhea starts. Good fluids for treating diarrhea at home include weak teas, rice water, plain water, soups, lassi, breast milk, and ORS.

ORS is especially good as a fluid for diarrhea because it restores appetite and energy by increasing the absorption of salt and water into the body. ORS is a cheap, highly effective therapy and will prevent the majority of deaths from dehydration if used early enough in diarrhea and in sufficient amounts. ORS packets contain the correct scientific balance of salts and sugar to treat dehydration. ORS is available free from the BHC or MCH Clinic.

Most Afghans have heard of ORS but only one in five, in the Pakistan refugee camps, know how to prepare it correctly. The most common mistake made in preparation is adding the wrong volume of water. Other common mistakes are not using the whole packet of ORS, or boiling the water used for making ORS. The time taken boiling the water and allowing it to cool delays the start of giving ORS. The cleanest water available should be used. Reliable water sources are tap water, tube wells, and cement lined wells with a cover and a pump. ORS will not stop the diarrhea, but will help to prevent and treat dehydration. It is therefore life saving. If the child vomits after taking fluids, this is often because the child is very thirsty and has been taking fluids too quickly. Parents will be more willing to use ORS if they understand that it works not by stopping diarrhea, but by replacing fluid loss. The VHSs should tell the parents about the healing properties of ORS in restoring appetite, improving energy and decreasing weakness. They should advise parents to look at the child and not at the stools. Parents should not worry about the child passing watery stools if he is also alert and taking fluids well.

The UNHCR survey of both NWFP and Baluchistan showed that very few Afghans understood how to prepare Salt and Sugar Solution (SSS) correctly and that they rarely used it for diarrhea home treatment. It was decided to stop promoting SSS in the Afghan refugee health program.

Continue food during and after diarrhea

Diarrhea lasts longer and is more severe in children with malnutrition. Diarrhea can also cause malnutrition because:

- Nutrients are lost from the body in the diarrhea stools
- A person with diarrhea often has a poor appetite and will therefore not be offered food
- The traditional custom, parhaiz, is to withhold foods from a person during diarrhea and for some days after the diarrhea has stopped

The vicious circle of diarrhea leading to malnutrition leading to diarrhea has to be broken. To prevent diarrhea from leading to malnutrition, soft foods should be given to children with diarrhea as soon as they can eat. Good foods for diarrhea include breast milk, kidgiri (rice and lentils), yogurt, banana, and mashed potatoes. A teaspoon of oil should be added to each serving to give extra energy. Giving food during diarrhea increases the absorption of water and gives the child energy and strength to fight the illness. Food also reduces the number of days that the diarrhea lasts and therefore acts as an antidiarrheal. Food stimulates enzymes in the intestinal wall which are essential to the process of digestion. If food is not given, these important enzymes stop working. An extra meal of oil-enriched food should be given each day for 2 weeks after diarrhea has stopped. This extra meal provides energy and protein for the "catch up" growth which takes place after diarrhea has stopped.

Medicines for diarrhea should only be prescribed by the clinic

Medicines are not required in the majority of diarrhea cases. Most diarrhea cases are self-limiting and stop in 4 to 5 days without any special treatment apart from **ORS, fluids** and **food.** Antibiotic use should be limited to special diarrhea cases with blood or an associated bacterial infection, such as an

ear infection or pneumonia. It is now known that antibiotics, if used in diarrhea cases other than these special ones, can be harmful and my even prolong the diarrhea. Antimotility medicines like opium (afeem), Imodium, Loperamide, Lomotil, and Rheatrol slow the elimination of the microbes and toxins and can lead to severe drowsiness, bowel obstruction, toxemia, and death. These antimotility medicines have been banned in other countries. Other antidiarrheals like Streptomagma and Kaopectate are useless. Antiemetics used to stop vomiting, such as Maxolon and Dramamine, make children very drowsy so that they do not drink or eat enough and become dehydrated. Antispasmodics like Buscopan also cause drowsiness. *No antidiarrheals, no antiemetics, and no antispasmodics* should be used in children, especially those under 5 years.

The UNHCR survey showed that nearly three in four Afghan refugee children are given medicines from the bazaar as part of the home treatment of diarrhea. Afghans spend large sums of money on these useless and often dangerous medicines. Parents of children with diarrhea often bring large plastic bags full of these useless medicines to the BHC. Many parents will ask the health workers for medicines to stop diarrhea. It is important that the VHSs take time to explain to the parents the dangers of giving bazaar medicines which have not been prescribed by the clinic staff.

The danger signs of diarrhea

The presence of danger signs means that the child is not getting better on home treatment and needs referral to the clinic. Use the **head-to-toe examination** for teaching the danger signs.

*The head-to-toe examination for **danger signs in diarrhea** is:*

- *Forehead* — *Fever*
- *Mouth* — *Thirst, eating and drinking poorly*
- *Bottom* — *Blood in stools and frequent stools*

Children with fever, frequent vomiting, and frequent stools are more at risk of developing dehydration and should therefore be given increased fluids and referred to the clinic for ORS. Children with blood in the stools need fluids, food, and a course of antibiotics from the clinic staff. Children who are very thirsty and irritable are showing the early signs of dehydration and should therefore be referred to the clinic for the treatment of dehydration with ORS. If VHSs ask you about other signs of dehydration like sunken eyes or a sunken fontanelle explain that these are much *later* signs of dehydration and the child is at risk of developing *severe* dehydration. The child should be referred to the clinic *before* these late signs develop. This is why the danger signs taught to the VHSs emphasize the *early* signs of dehydration: **thirst and irritability**.

How to prevent further episodes of diarrhea

Diarrhea is caused by microbes in feces contaminating water, food, fingers, feeding bottles and soothers; in other words, everything that goes into the mouth. Flies also help to spread diarrhea. Malnourished children have diarrhea more often and more severely than well nourished children. This

explains why there is more diarrhea in communities where hygiene is poor, bottle feeding is common, and children are malnourished.

Breast feeding is one of the best protections against diarrhea. Breast milk contains antibodies that protect babies from diarrhea microbes. Mothers should give only breast milk to their babies for the first 4 months of life. During this time extra fluids and foods are not necessary and should not be given because they introduce microbes that can cause diarrhea. This is why babies who are breast fed get very little diarrhea and children who are bottle fed get diarrhea. A mother should start breast feeding as soon as possible after the baby is born. Other fluids such as gutti, sugar water, formula milk, and water should not be given. Studies in Pakistan have shown that even during the hot season, breast feeding provides enough fluid for babies under 4 months of age and giving extra water is not necessary. A mother should increase the frequency of breast feeding during and after diarrhea.

Bottle fed babies get diarrhea because it is difficult to keep the inside of feeding bottles clean and the water for making milk formula often contains microbes which cause diarrhea. A cup and spoon should be used instead of a feeding bottle for giving fluids. A famous Pakistani pediatrician has called feeding bottles for children a "prescription for death." Even in the United Kingdom, where hygiene is good and female literacy levels are high, studies have shown that British babies who are exclusively breast fed for the first 4 months of life are 3 times less likely to get diarrhea, ear infections, and severe chest infections that bottle fed babies of the same age.

Mothers can protect their families from diarrhea by washing their hands with soap and water before touching food or feeding a child. The soap helps to remove microbes which cause diarrhea from the hands.

The role of the VHS in home treatment of diarrhea

The majority of diarrhea cases can be treated successfully at home by following the 5 prime messages. These are:

1. Give the child at least one extra cup of fluid after each watery stool to replace water loss.
2. Continue feeding the child with breast milk and soft foods.
3. Do not give medicines for diarrhea; they may be dangerous and should only be prescribed by the clinic staff.
4. Take the child to the clinic if the child has any one of these danger signs:
    - Has fever
    - Becomes very thirsty
    - Eats or drinks poorly
    - Vomits frequently
    - Has blood in the stools
    - Passes very frequent stools

5. Prevent the child from getting another episode of diarrhea by advising the parents to:
   - Breast feed exclusively for the first 4 months of life (no other fluid or foods)
   - Use a cup and spoon, not a feeding bottle
   - Wash hands with soap and water before touching food

The objectives of the CDD program for the Afghan refugees have been to teach all parents these 5 prime messages and how to prepare and give ORS. An ORT corner is being established in some clinics in Afghanistan and in refugee camps to teach these prime messages and ORS preparation to all parents of children with diarrhea treated at the clinic. Every diarrhea case will be given 2 ORS packets to take home. You should take your VHSs to visit the ORT corner if one is established in the local clinic. The VHSs' role is to make home visits to children with diarrhea and teach these prime messages and ORS preparation to their parents. They should also use the ORS liter jug in their VHS kit to mark a line with their marker (or a nail) on a metal container in every household they go to. This container can be a kettle, cooking pot, or jug and will vary in different households. Marking a container will help mothers know how to prepare ORS correctly using a liter of water.

When a VHS first arrives at a home to visit a diarrhea case, she should ask questions to find out how the parents have been treating the child. If danger signs are not present, the VHS should stay with the parents and make sure they give enough fluids and ORS. One problem is that traditionally only small amounts of fluids are given during diarrhea, perhaps 1 to 2 teaspoons 2 or 3 times a day. The VHS must sit with the parents and show them how to give a teaspoon of fluid every minute.

The VHSs can help the parents deal with any problems that may arise, such as vomiting. If a child vomits, the parents should wait 10 minutes and then start offering fluids more slowly, giving a teaspoon every 2 or 3 minutes. Often a mother will say that her child will not take ORS, but the VHS will find that if she sits with the mother and patiently shows her how to give ORS with a cup and spoon, the child will take it easily. They should also encourage the parents to start soft foods as soon as the child wants to eat and show them how to mash the food and add a teaspoon of oil to each serving.

The VHS must help the mother breast feed more by encouraging her to put the baby to the breast more frequently and getting the baby to suck for a longer period of time at each breast. Once the parents are able to follow all the prime messages, the VHS can leave and then visit the child again the next morning. If the child has improved she can advise the parents to carry on with the same treatment. If the child has not improved or has developed any danger signs, she should tell the parents to take the child to the clinic.

VHSs should report any increase in the number of diarrhea cases in their community to their supervisor, who should then report this information to the clinic or local authorities. If the clinic staff suspect an epidemic of diarrhea, they will ask the VHS to re-emphasize the following advice to the community:

- Breast feed, do not bottle feed (use a cup and spoon instead)
- Boil water for drinking

- Wash hands with soap and water before touching food
- Do not eat raw vegetables and fruit
- Stools should be disposed of down a latrine or buried

The story of Shaheeda's baby who got diarrhea

This is the story of Shaheeda and her 8 month old baby son. Everybody in the community had complained to the group leader about the poor quality of water in the main well. He kept promising to buy some cement to improve it, but nothing ever seemed to happen. The clinic staff had asked the group leader to help them with the latrine building program. That had been one year ago and still only half the houses had their own latrines. Shaheeda's house was not one of them.

Kala Jan had just finished her training as a VHS. In the previous few weeks, Kala Jan had noticed that she was being called to more and more cases of diarrhea. Some of the children were very sick when she arrived, and after assessing them, she sent them straight to the clinic. She had decided to inform the Trainer/Supervisor working at the clinic about the increase in diarrhea cases she had seen, and had asked her husband to inform the group leader. She had gone around telling all the mothers of small children to boil water before giving it to them.

Shaheeda asked Kala Jan to come to see her baby, who had started producing watery stools 2 days ago. Her mother had taken her and the baby to the local mullah, who had given them a tawiz and advised Shaheeda to give water but stop any solid food. She had followed this advice, but the baby seemed to be shrinking away. When Kala Jan arrived, she asked the assessment questions for diarrhea she had been taught in the VHS program.

Ask the VHSs what questions Kala Jan should ask.

Shaheeda explained that she had been giving her baby breast milk and water. Her husband had brought some medicine at the bazaar to stop the diarrhea. After taking the medicine, the baby's stomach had swollen up a little. She explained that the baby was not thirsty, was eating and drinking well, and had not been vomiting. The baby was passing a few watery stools a day and they contained no blood.

Ask the VHSs what Kala Jan should do with the baby.

Kala Jan decided that Shaheeda's baby did not have any of the danger signs for diarrhea. She praised Shaheeda for continuing to breast feed and for giving extra water. She then started to explain the prime messages for the home treatment of diarrhea.

Ask the VHSs what the prime messages for the home treatment of diarrhea are.

Shaheeda's baby passed a watery stool, so Kala Jan showed her how to give the baby an extra cup of fluid, giving a teaspoonful every minute. She explained that good fluids for diarrhea are rice water, weak tea, lassi, soup, and ORS. Shaheeda explained she had a packet of ORS in the house and would like to use it. Kala Jan told her that ORS was a good fluid because it would restore her baby's appe-

tite and strength quickly. She asked Shaheeda to bring a metal container from the kitchen. Kala Jan took the plastic one liter ORS jug from her kit and filled the container to the line with clean water from the covered well in the garden. She then poured this water into Shaheeda's kettle and scratched a line at the level of the water on the inside of the kettle. "This is the one liter line and every time you make ORS you should use the line in this container to measure the water." Kala Jan then showed Shaheeda how to empty the whole packet of ORS into the water in the kettle and mix it with a clean stirring spoon. She then placed the lid back on the kettle. Shaheeda started giving her baby a teaspoon of ORS every minute. Kala Jan explained that if she gave it more frequently than this, her baby may vomit. After the baby had finished the whole cup of ORS, Kala Jan encouraged Shaheeda to breast feed her baby again.

Ask the VHSs what advice Kala Jan should give next.

Kala Jan was very pleased because the baby was taking fluids well. She now advised Shaheeda to give some soft food like banana, yogurt, rice and kidgiri. Shaheeda looked shocked. "But the baby has a tawiz and parhaiz from our local mullah. My baby is only allowed breast milk and water," she explained.

Ask the VHSs what they would say to Shaheeda.

Kala Jan called Shaheeda's mother over and explained to both of them that the tawiz was a very good protection for the baby, but the baby also needed good food to fight the illness. She explained that many babies became thin after diarrhea because their mothers stopped feeding them. The same thing could happen to Shaheeda's baby. Shaheeda's mother had already seen one grandchild die of diarrhea, and she didn't want it to happen again. She remembered that parhaiz was also recommended for that baby. "God gave us a mind so that we could learn from our mistakes," she thought to herself. Shaheeda's mother went off to make some kidgiri for her grandson. Kala Jan advised her to add a teaspoon of oil to each serving and then give a few teaspoons of kidgiri 6 times a day.

Ask the VHSs what advice Kala Jan should give next.

Kala Jan asked Shaheeda's husband to show her the medicine he had brought for the baby to stop the diarrhea. She said: "This is why your baby has a swollen stomach. I am going to take this medicine and throw it down your latrine. The only medicines you should give your baby are medicines prescribed by the clinic staff. Any other medicines are useless and sometimes even dangerous." "But I don't have a latrine," said Shaheeda's husband. "Why not?" asked Kala Jan. "Our group leader has not got around to organizing building one yet," he explained. "We should ask him to hurry up. Latrines are very important for cleanliness and to help prevent diarrhea," said Kala Jan.

Ask the VHSs what advice Kala Jan should give next.

Kala Jan explained the danger signs to Shaheeda using the head-to-toe method and told her to take her baby to the clinic if he developed any one of these signs.

Ask the VHSs what advice Kala Jan should give next.

Kala Jan could see a feeding bottle in the other room. Shaheeda explained she had been using it to give cow's milk to her baby. Kala Jan explained to Shaheeda that she could reduce the risk of her baby getting another episode of diarrhea by replacing the feeding bottle with a cup and spoon. Kala Jan was pleased to see soap in a container near the family's hand washing bowl. She asked Shaheeda when the soap was used. Shaheeda explained they used it mainly when they had guests. Kala Jan explained that if Shaheeda washed her hands with soap and water before preparing food for her baby or feeding her baby, she could reduce the risk of the baby getting diarrhea. Shaheeda was very happy to hear this. She could then understand that the feeding bottle and her dirty hands had increased the risk of her baby getting diarrhea and she was determined not to let it happen again.

Shaheeda's baby had now taken 2 cups of ORS, one cup of some special rice water made by Shaheeda's mother, and a bowl of kidgiri. He had vomited once after the first cup of ORS, but Kala Jan explained that because he was thirsty he had taken the ORS too quickly. She advised Shaheeda to wait a few minutes and then give it more slowly, a teaspoon every 2 or 3 minutes. Kala Jan was pleased with the progress Shaheeda's baby was making and explained that she would come back the next morning to check up on him.

Ask the VHSs what Kala Jan should do before she leaves.

Kala Jan asked Shaheeda to repeat the prime messages to her before she left. Shaheeda explained them all perfectly.

When Kala Jan visited the next morning, Shaheeda's baby was getting much better and had only passed one watery stool overnight. Kala Jan explained that they should carry on with the treatment and watched Shaheeda make a liter of ORS. She was pleased to see that Shaheeda made it correctly using the kettle she had marked the previous day. She advised Shaheeda to give the baby an extra meal each day for 2 weeks after the diarrhea stopped. Shaheeda and her mother thanked Kala Jan for her help. They heard later that the group leader's little baby daughter had died of diarrhea, and that he was so shocked by this that he was pushing through the well improvement program as fast as possible. He had also learned his lesson, Shaheeda's mother thought sadly to herself.

CHAPTER 17

Immunization Module

Learning Objectives

By the end of this session, the participant will be able to:

1. Teach the prime messages relating to Immunization to a VHS, appropriately using the immunization poster
2. Explain in simple language to a VHS why immunizations are important for every infant, young child, and mother
3. Name the 6 childhood diseases which are preventable through immunization, using local language, and describe the main symptoms of each
4. Clearly explain to a VHS how many immunizations are necessary for every infant and child, and at what time intervals or ages
5. Clearly explain to a VHS which immunization is important for mothers, and how many or at what intervals
6. Explain to a VHS the common side effects after immunizations (which do not cause any harm)
7. Explain to a VHS the difference (using simple local language) between immunizations and antibiotic injections
8. Explain to a VHS the importance of an immunization card or record, and where to go locally for immunizations. (Know the specific health center, provider, and immunization days or sites if there is a mobile team.)

PRIME HEALTH MESSAGES

1. Immunizations keep children healthy; they protect against 6 childhood diseases.
2. Immunizations can protect you and your child against these 6 diseases:

   (**Note:** Use the local names for the 6 diseases below.)

   a. Diphtheria

   b. Whooping cough

   c. Tetanus

   d. Polio

   e. Measles

   f. Tuberculosis (TB)
3. Vaccinations are best **started at birth** and completed in the first year of life. Each child will need 5 **vaccination sessions.**
4. Immunizations are given in different ways: by mouth, by a needle, and by a scratch on the skin.
5. Immunizations are also important for women. A **mother needs** to receive 5 **tetanus immunizations** throughout her life to fully protect her (and her newborn) from tetanus.
6. A baby who receives the full set of 5 **vaccination sessions** at the right time intervals will be protected against these diseases.
7. Following vaccination, a child may develop a mild fever, a slight rash or sore, or seem slightly more irritable than normal—**do not worry.** These are signs that the vaccine is working and **will not harm** your child.
8. At the time of immunization you will receive a **vaccination card** to keep a record of your baby's (and your own) vaccinations. Take it with you any time you or your baby are receiving an immunization. Store it in a safe place at home.
9. **Know your local vaccinator** or health provider. Know where to go and what days or times to receive immunizations at the clinic or mobile vaccination unit.

EXERCISES

EXERCISE 1

WHY IMMUNIZATIONS ARE IMPORTANT

CREATIVE EXERCISE

Directions: Divide into 2 groups. Using the EPI prime messages, each group will discuss why immunizations are important and how to motivate parents to take their infants for timely vaccinations. Each group will then develop a simple exercise for the VHS to use with mothers, illustrating these main points. The exercise may be a story or a role play that can be taught to the VHS and then to discussion groups. Have each group present their exercise to everyone to share their "tool" or exercise.

Time: 60 minutes (40 minutes for development of exercise, 20 minutes for large group presentation)

Materials: VHS kit, paper, markers

EXERCISE 2

THE 6 VACCINE PREVENTABLE DISEASES, VACCINATION SCHEDULES

QUIZ SHOW GAME

(**Note**: This exercise is only for Trainer/Supervisor workshops because it requires the ability to read.)

Directions: Prepare a list of 20 questions in advance, or if time allows have the class make up questions relating to the prime messages (1 or more each, or develop in small groups). Divide the class into 2 teams. Explain the rules of the game. The announcer will read a question, drawn randomly. The first team to raise their hands to answer the question will have the opportunity. If they answer correctly, that team scores a point. If not, the other team has the opportunity to answer. Two individuals may be selected to serve as "judges" to decide if the answers are correct (optional). If judges are going to be used, they should be selected before teams made to avoid bias. Alternative rule—the teams may line up so that 1 member from each team is paired to compete with 1 member from the other team. After the question is asked, they must go to the board and write their answers. The first to write correctly wins the point.

Time: 45 minutes if questions are prepared in advance; 60 minutes if groups develop the questions.

Materials: Blackboard, chalk, list of 20 questions relating to immunization prime messages (optional)

EXERCISE 3

COMMON SIDE EFFECTS OF IMMUNIZATIONS

GROUP DISCUSSION

Directions: Discuss common side effects and associated folk beliefs about immunizations. Solicit thoughts and experiences from the full group. Discuss how to effectively address each belief. Decide how to tell mothers about side effects in a manner that reassures them rather than makes them afraid to go for immunizations. This exercise can be carried out in a full group or small groups.

Time: 45 minutes

Materials: None

REFERENCE PAGES

The family needs to know that young children can be protected from some dangerous diseases. Use the **head-to-toe examination** to help the VHSs to remember the diseases.

Measles

Point to your **eyes**. A child with measles always has red eyes.

Whooping cough

Point to the **mouth**. A child with whooping cough will make a strange whooping sound and may vomit after a bout of coughing. Show the VHSs what a child with whooping cough does, pointing to your mouth to show the whooping sound.

Diphtheria

Point to your **throat**. Diphtheria causes severe swelling in the throat. You *must* explain that the *vaccine does not prevent all throat infections*, only the small number that are very dangerous and are caused by diphtheria microbes. People will lose confidence in vaccinations if they are told that they prevent all throat infections. They know that children, even those who have been vaccinated, have sore throats all the time.

Tuberculosis

Point to your **chest**. Most Afghans know about TB and are very frightened of it. They often see the TB cavities in the lungs of animals who have died from TB.

Tetanus

Use your **body** to show how a child with tetanus stiffens the arms and arches the back.

Polio

Point to your **leg** and explain that a child with polio is lame.

Parents may be afraid of these vaccinations because they have heard that they can give the baby a sore that takes a long time to heal, or a fever and rash. If a mother is busy with her other children she does not want to look after a baby who becomes sick after being vaccinated. Afghans do not take the baby out of the house in the first 40 days after delivery for fear of the evil eye. They are therefore reluctant to take newborns to be vaccinated. The VHS should explain that the parents have to think of the baby's future. The vaccinations are like a special tawiz for the baby what will protect against jinn, the evil eye, and anything else that the parents think cause diseases. The baby has to have these vaccinations 5 times in the first year because the baby cannot be fully protected against all diseases in just one vaccination session. In the same way one tawiz will not protect the baby against all diseases.

How vaccinations work

Children only get whooping cough or measles once in their life. If they survive the illness, they do not get these diseases again because their bodies have learned how to fight the whooping cough and measles microbes. We say that they have protection from these diseases. This is what vaccines do. They protect the body from attack by microbes of the 6 diseases. Vaccines are like an army protecting the body from the attack by enemy microbes. To get this army to full strength, with all its guns and tanks, the child needs 5 vaccinations starting as soon after birth as possible. The baby must be vaccinated a few months before the usual age for getting a disease. For example, a child usually gets measles around one year of age and thus is vaccinated at 9 months to protect him against measles. An army also needs enough food in order to fight the enemy. In the same way, the child needs good food to fight the enemy microbes.

The vaccine preventable diseases

Afghans recognize that most of these diseases are a problem in their communities. They have seen children disabled with polio. They are very frightened of the wasting disease TB, and keep away from people with signs of the disease. They have seen large numbers of children die in an area following a measles or whooping cough epidemic. They have probably noticed a reduction in these diseases in their refugee community over the last few years. There will still be a few cases of these diseases in children who have not been vaccinated, but the large epidemics no longer occur in communities with a widespread vaccination program. The mother's milk protects the baby from some of these diseases in the first few months of life.

Measles

Like all the vaccine preventable diseases, measles is infectious (it is caught from somebody else with the disease); it comes on about 10 days after being in contact with a person who has measles. This is why measles can spread so quickly through a community as an epidemic. The microbes are sneezed and coughed out and breathed in through the nose and mouth. The first signs are a runny nose, red watery eyes, and a cough. After 2 days a red rash appears behind the ears and then spreads down the body, disappearing after about 5 days, leaving peeling skin. The child is miserable and has a very sore mouth and eyes. Some children also develop a rash on the lining of the lungs and bowel, leading to complications like severe chest infections or chronic diarrhea. These complications cause malnutrition and a high death rate following measles. Another complication is blindness from the eye infection and vitamin A deficiency. Thin children are more at risk from these complications of measles. A child with measles should be kept away from other children and pregnant women until the rash has disappeared and should be checked by the clinic staff for complications that might need treatment. They should be weighed regularly to check that they have recovered from the illness and are growing normally.

Whooping cough

Two weeks after contact with somebody who has whooping cough, the child will develop a runny nose, slight fever, and cough. This will continue for 2 weeks and then the child will develop bouts of severe coughing followed by whooping sounds and vomiting. Between these coughing attacks the child is fairly well, apart from losing some weight from the repeated vomiting. The cough can con-

tinue on and off for up to 3 months. These severe bouts of coughing can lead to death from blocked breathing and bleeding into the brain, especially in children under 1 year. This is why it is important to start vaccinations to protect the baby against whooping cough as early as possible, around 6 weeks of age.

Diphtheria

This begins like a cold with fever, headache, and a sore throat. The child then becomes very sick, with a swollen neck, bad smelling breath, and a membrane that grows over his throat and blocks the breathing. The child becomes very sick and dies if not treated quickly with special medicines.

Tetanus

Remember that older children and adults can also get tetanus from dirty skin wounds. Newborn babies get tetanus from dirty cords caused by not following **the cleans.**

Tuberculosis

All the other diseases described here occur more commonly in children than adults. TB is different in that there are probably more adults in a community with TB than children. These adults can give TB to children they come into contact with. Most adults get TB only in the lungs but in children TB microbes can damage many parts of the body including the brain, bones, and spine. A child with TB will have signs of ill health, weight loss, low fever, cough, and delayed development in the milestones over a period of several months. There is often an adult in the child's house with TB. The BCG vaccine protects against TB and should be given as soon after birth as possible. The vaccine is given in the upper arm, usually on the right side. About 2 to 3 weeks after the vaccination, a small red lump appears over the vaccination site. This lump forms a small abscess after 1 week which then discharges, forming a crusts and a small ulcer. The ulcer slowly heals, leaving a red scar that gradually grows paler in color. The scar is permanent. This ulcer formation is quite normal and means that the vaccination is working to protect the child against TB. The VHSs should advise women not to put anything on the scar and to let it dry in the air. Try to check the children for scars in every house you visit. The VHSs should also get the habit of doing this during every home visit they make.

Polio

Polio microbes live in the bowel, which is why the polio vaccine is given by mouth rather than by an injection. Polio microbes are passed in the stool and spread to other people via the 6 spreaders of disease (feces, feeding bottles, flies, fingers, food, and fluids). The sickness starts with fever, diarrhea, and painful muscles. If a polio vaccination is given to the child at this time it can make the muscle weakness which develops later even more severe. After a few days, the fever and diarrhea settle and the child is left with a weak limb, most often one or both legs, but sometimes an arm.

If children have these signs they should be taken to the clinic to be checked. When the fever and diarrhea have settled, the parents should help the child to start walking. The child should be checked regularly at a special physiotherapy center and may need special support for the legs when walking. The special center will advise the family on ways to adapt the house so that the disabled child with polio can lead as normal a life as possible.

Exhibit 17.1

The Vaccination Schedule

Age	Vaccine
At birth	BCG Polio mouth drops
6 Weeks (1.5 months)	DPT Polio
10 weeks (2.5 months)	DPT 2 Polio
14 weeks (3.5 months)	DPT 3 Polio
9 months	Measles

Why children still die of these diseases

There are several problems with the vaccination program which prevent it from giving complete protection to all children.

- **Not all children under 2 years old in the village are reached by the vaccination program.**

  Some children are not brought for vaccination by their parents. Some villages are very rural and are not reached even by mobile vaccination teams. Parents do not bring their children to be vaccinated when they are sick or thin. These children are at high risk of getting the diseases, so it is even more important to vaccinate them. The VHSs must reassure parents that it is safe to vaccinate sick and thin children. Some parents do not want to have their children vaccinated because they hear that vaccines make the child sick with a rash, fever, or sore. The VHSs must explain to the parents that these are only mild sickness and mean that the vaccine is working to protect against the 6 more serious sicknesses. The VHSs should tell them not to worry about it.

- **Children are not vaccinated young enough.**

  Children should be vaccinated at birth or as soon after birth as possible. The VHSs can help improve the vaccination program by reporting every delivery to the clinic. They must reassure the parents that it is safe to vaccinate a newborn baby.

- **Children do not complete all their vaccinations.**

  Children need 5 vaccinations sessions to be fully protected. The parents must take the child's vaccination card every time they go to the clinic and the staff will check to see whether the child has completed all 5 vaccinations. The clinic staff will tell the parents when to come back for the next vaccination. The VHS can bring the vaccination cards of families under her care to the resupply sessions for the clinic staff to check. The parents must keep these cards in a safe place so that they do not lose them or get them dirty.

A community needs to have *all* the children under 2 years vaccinated to prevent epidemics of measles, whooping cough, and polio. If only a few children in the community are vaccinated, these epidemics may still occur. The VHS can do many things to help improve the vaccination program in her area.

Story about Maryam's baby and vaccinations

This is a story of Maryam and her first baby. The whole family is very excited because Maryam has just had her first baby after being married for 6 years. The whole house celebrates and invites lots of guests. One of the guests is Kala Jan, the newly trained VHS, who helped deliver Maryam's baby. Kala Jan congratulates Maryam's husband on his new baby son and advises him to take the baby to the clinic for his first vaccination. She explains that this first vaccination will protect his son against TB and polio, but the baby will need 5 vaccinations sessions in the first year to protect against all the life threatening diseases.

Maryam is not happy about taking her newborn baby out in the cold weather. She thinks he is so beautiful that the evil eye will get him and make him sick. She feels very confused because she knows that vaccines are very important, but she just cannot bring herself to take her baby outside. Kala Jan hears that Maryam is very worried and comes to visit her. She listens carefully to everything Maryam has to say. She then explains to Maryam that if she paints kohl between the baby's eyes, wraps him up in warm clothes from head to foot, and hides him under her chadre when she takes him out, the cold and evil eye will not be able to hurt him. She explains that the vaccinations are like a tawiz that will protect the baby. Maryam is very happy to hear this, and so she follows Kala Jan's advice, and takes her son to be vaccinated. After 3 weeks he gets a little scar on his arm, but Maryam is not worried about this, because Kala Jan had warned her this would happen and that it meant that the vaccine was working.

A few months later several children in the community come down with a fever that leaves them with weakness in the legs. The group leader tells Maryam's family that the clinic staff think these children have polio. The group leader is going around advising everybody to get their children fully vaccinated. "If the parents of those sick children had followed your example, their children would be healthy and walking around now," he says. Maryam feels very proud and her family compliments her on being a good mother.

Ask VHSs what they would say to mothers who do not want to take their newborn babies for vaccination.

CHAPTER 18

Nutrition Module

Learning Objectives

By the end of this session, the participant will be able to:

1. Teach the prime messages relating to nutrition to a VHS, appropriately using the nutrition poster
2. Perform demonstrations (noted below) associated with the prime messages, and teach the VHS how to perform these demonstrations for other mothers:
    - Food hygiene
    - Feeding a sick child
    - Proper breast feeding
3. Give at least 3 reasons why breast feeding is valuable for an infant
4. Explain to a VHS the following important points about breast feeding:
    - when to start
    - how often
    - how long to continue
    - practices that promote milk production
    - whom to see and where to go if there are problems
5. Explain to a VHS the following important points about weaning (i.e., supplemental feeding):
    - when to start
    - what foods to start
    - importance of food hygiene

6. Explain to a VHS the importance of good nutrition and the need for pregnant and breast feeding mothers to consume additional food
7. Give 3 examples of locally available iron-rich foods and of vitamin A-rich foods
8. Give 3 examples of well-balanced nutritious meals using locally available foods and be able to demonstrate their preparation
9. Discuss the relationship between good nutrition and good health/growth in terms that the VHS can easily understand
10. Recognize the signs and symptoms of vitamin A deficiency, and know where to refer for treatment (treatment methods may be taught later as the VHS Program develops)
11. Perform mid-upper arm circumference measurement, understand the measurement, and make appropriate referrals to a local provider (**Optional:** can be added later as the VHS Program develops)

Prime Health Messages

1. Feed your infant only breast milk starting immediately after birth; continue feeding **only breast milk for the first 4 to 6 months.**
2. **Begin** additional **supplementary** (weaning) **food at 4 to 6 months** of age, but **continue to breast feed** until the child is 2 years old.
    a. Introduce new foods one at a time.
    b. Make the food soft by mashing or straining it.
    c. Give small amounts with a clean spoon just before breast feeding.
    d. Slowly increase to 6 spoonfuls, 6 times a day.
    e. The baby may have a little diarrhea or constipation from the new food, but this is normal.
    f. By 1 year of age, the child should be eating the same food as the family.
3. Practice the **4 cleans** (clean hands, clean surface, clean instruments, clean coverings). Wash your hands with soap and water before touching food for preparation or feeding. Keep the feeding surface clean from old food and dirt. Use a clean spoon and cup. Cover food. No feeding bottles or soothers. Note: Reinforce Personal Hygiene and Environmental Sanitation module prime health messages #2, #3, #4, and #6.)
4. Breast milk is a **"natural immunization"**. It will help protect your baby from sickness.
5. **Continue to breast feed a sick infant or child,** but increase the frequency during the illness and afterward for 2 weeks. Continue to feed the sick child, especially during diarrhea. Remember to increase food (an extra meal per day) for 2 weeks following an illness.
6. Pregnant mothers need more food than usual for growth and energy for themselves and their unborn babies. Breast feeding mothers also need extra food so they will make good milk. A good diet for pregnant women includes foods from each group at every meal:
    a. Body-building foods: bread, rice, peas, nuts, dahl, milk, eggs, and meat
    b. Foods to make the baby grow well: bread with dahl, beans, or peas
    c. Foods which provide extra energy: fats and oil
    d. Dark green leafy and yellow vegetables and fruit: leaves, spinach, carrots, pumpkin, melon, apricots, oranges. (Note: Emphasize the need for vitamin A-rich foods such as these vegetables and fruits.)
7. Pregnant and breast feeding women need iron-rich, animal foods like eggs, milk, and meat, along with bread, to make their blood strong and for good growth.
8. Good, well-balanced nutrition is essential for good health and normal growth.

Exercises

Exercise 1

Breast Feeding Basics

Group Discussion

Directions:

a. Review basic facts about breast feeding in the prime messages about nutrition and control of diarrheal diseases.

b. Select 2 individuals to lead a discussion about breast feeding principles during and after illness, especially diarrheal disease.

Time: 1 hour (30 minutes for part a, 30 minutes for part b)

Materials: Nutrition poster, control of diarrheal diseases flip chart

Exercise 2

Breast Feeding/Weaning Feeding

Story Telling

Directions: Divide the class into 2 groups. Group #1 will create its own list of 2 or 3 facts about breast feeding, drawn from any of the prime health messages (nutrition, CDD, personal hygiene). Using these facts and any available props, each group will create a short story incorporating the 2 or 3 basic facts. Group #2 will do the same activity but in regard to weaning food/supplementary feeding.

Time: 60 minutes (30 minutes to develop and practice the stories, 10 minutes each to present, 10 minutes discussion)

Materials: Nutrition (breast feeding and weaning) posters

Exercise 3

Nutrition During Pregnancy and Breast Feeding

Large Group Role Play

Directions: 3 individuals will perform the scene in front of the large group. After completion of the role play, participants will be asked to provide a critique, share experiences, and make suggestions.

Continued

Continued

Roles: 1 VHS, 1 Husband of a Pregnant Woman, 1 Pregnant Woman

Situation: The VHS is making a home visit to a pregnant woman in a nearby compound. The VHS begins a conversation with the husband to stress the prime health messages for nutrition during pregnancy. She stresses the key points he should know in regard to his wife's nutrition. The husband did not want to talk to the VHS. He does not believe in the value of her services, and he is not very interested in preventive health or health education.

Time: 30 minutes (15 minutes role play, 15 minutes discussion)

Materials: Nutrition poster, safe motherhood flip chart

Exercise 4

Balanced Meals/Iron and Vitamin A-Rich Foods: Creating Nutritious Menus

Small Group Exercise

Directions: Divide into groups of 3 to 5 members each. Each group will prepare a well balanced, nutritious, low cost menu for breakfast, lunch, dinner, and snacks for a pregnant mother. They should be able to describe why they chose each food, and especially point out those rich in iron or vitamin A. All foods included should be locally available. Each group will present to the class.

Time: 45 minutes (30 minutes preparing menu, 15 minutes presentations)

Materials: Blackboard and chalk, or flip chart paper, and markers

Exercise 5

Relationship Between Nutrition and Health/Growth

Individual Illustration

Directions: Each person should create a picture illustrating the importance of good nutrition and its relationship to good health and growth. State which prime nutrition health message the picture reinforces. Put all the pictures on the wall. Chose 1 or 2 for explanation and discussion.

Time: 30 minutes (20 minutes to create a picture, 10 minutes discussion)

Materials: None

REFERENCE PAGES

Proper nutrition is essential for children in order to grow, and for pregnant and lactating women in order to be strong and to provide sufficient nutrients for their unborn and breast feeding children. The information which follows below pertains largely to nutrition for children. Additional information about nutrition for women can be found in the "Safe Motherhood" module.

Essential messages about breast feeding

A number of essential messages about breast feeding should be understood by all health workers. They serve as a basis for understanding the relation between health services and the successful initiation and establishment of breast feeding, and the role that health care facilities should play in protecting, promoting, and supporting it. These messages include:

- Breast feeding is an unequalled way of providing ideal food for the health growth and development of all normal infants. Ideally, exclusive breast feeding will be the norm for the first 4 to 6 months of life.
- Virtually all women can lactate; genuine physiopathological reasons for not being able to breast feed are rare.
- Anxiety associated with unfounded fears of lactation failure (the inability to produce milk) and of milk insufficiency (the inadequacy of breast milk for meeting the nutritional needs of the normal infant) is one of the most common reasons for mothers' failing to initiate breast feeding, interrupting it prematurely, or beginning complementary feeding before it is nutritionally required. Emotional support will strengthen a mother's confidence that she can successfully breast feed.
- Anesthesia, strong sedation, prolonged labor, surgical intervention, and other sources of stress, discomfort, and fatigue for mothers and infants impede the initiation of lactation.
- Close mother-child contact immediately following birth and frequent sucking at the breast are the best stimulus for milk secretion.
- The correct positioning of the infant at the breast is important to facilitate feeding, ensure milk supply, and help prevent sore or cracked nipples and breast engorgement.
- The first milk, called colostrum, is of particular nutritional and health value to the infant because of its high content of protein and vitamins and its anti-infective properties. It is the infant's first "immunization."
- Under normal circumstances the neonate requires no water or other food whatsoever during the first 2 to 4 days after birth while lactation is being initiated.
- Giving any other food or drink to the breast fed infant before about 4 months of age is usually unnecessary and may entail risks, including making the infant more vulnerable to diarrheal and other disease. Because of its effect on sucking and milk secretion, other food or drink given before complementary food is nutritionally required may interfere with the initiation or maintenance of breast feeding.

Suggested Action

Institutions and programs providing maternity services and care for newborn infants should ensure that essential messages about breast feeding are communicated to all staff concerned.

Weaning foods

When to start mixed feedings

When a baby is about 4 to 6 months old, the mouth starts to become ready to accept non-liquid foods. Teeth may begin to appear and the tongue no longer automatically pushes solid food out of the mouth. The stomach also begins to digest starch better. By about 9 months, babies are able to use their hands to put things into their mouth. Clearly, during this time children are becoming ready to eat some solid food. Babies who begin to eat semi-solid or solid foods before they are 4 to 6 months old usually take less breast milk, because their small stomachs are easily filled. As a result, they may not grow well. This will show up on the growth chart. A child may start to cry more often than before because of hunger and malnutrition. On the other hand, after 4 to 6 months of age, children are growing too big to thrive on breast milk alone. For these reasons, great care needs to be taken in deciding what foods to give these children. Every baby is different. Very big babies may be ready to start a mixed diet earlier than smaller ones.

In general, breast milk alone is perfectly adequate until the baby is at least 4 months old, or weighs 6 to 7 kg. Other foods are unnecessary before this time, and can be harmful. On the other hand, if other foods are not given as well as breast milk by the age of 6 months, most babies will not get enough food to grow well.

Start weaning when a child is between 4 and 6 months of age.

Remember that a child is part of the family. Babies are weaned by starting to give them foods the family eats. Remember also that these foods do not replace breast milk; they add to the diet of breast milk. They meet the baby's growing needs, and help develop the baby's ability to eat new foods. Breast milk will go on being a baby's main source of food for some time. It should be given for as many months as possible. Only later will family foods completely replace breast milk.

Breast feeding should also continue because it gives close contact between the mother and her baby. This contact is good for the baby's well-being, and for the mother's feelings of love and attachment. The closer the contact, and the more a mother holds her baby, the more aware she will be of the baby's needs. She will discover any new problems more quickly. If a mother is going to hand over responsibilities for looking after her baby to someone else, she should do this slowly and carefully.

Best foods for weaning babies

For babies of weaning age it is best to use foods that are:

1. good for the baby
2. easily available to the family
3. not too expensive

Usually these foods can be taken from those the family eat. Special ready-mixed 'baby foods' from stores and pharmacies may be easy to prepare, but they may also be more costly and less nourishing than foods prepared at home. Also, if a mother cannot really afford these foods, she may not be able to meet the baby's needs.

Only when the family diet is very poor in quality and quantity should foods be provided from outside. Foods not usually eaten by the family need only be given:

1. during famine
2. to extremely poor people who eat only the local staple food
3. as treatment for severe malnutrition

In these cases food brought in from outside the family may be needed for the baby to survive.

Traditional feeding practices for children

Most Afghan women believe that a good time to introduce weaning food is around one year of age, when the child has teeth or can actually reach out for the food. It is thought that at an earlier age the child will have problems digesting the food. Some even wait until the child is one and a half years old. There are a few special recipes for these first foods. Bread soaked in milk or soup, suji (water porridge), rice, eggs, and vegetables are given. More often, special food is not prepared and the children are given only dry bread or biscuits. This new food is often not given on a regular basis because the mothers are worried about it upsetting the baby. Breast feeding is often stopped very quickly after weaning food has been introduced, and the child is not allowed time to wean properly. A tawiz is obtained from the mullah when the child finally stops breast feeding for protection against jinn during this dangerous time. The child will then eat what the rest of the family eats, usually sitting with the women at meal times. At first the child will be given food on a special plate, but later the child will eat from the communal plate with the rest of the family. Children have to compete for food and the stronger, more active ones tend to get more food than the weaker ones.

Many Afghans believe that jinn cause children to become thin. Dais will prepare a mixture of herbs to treat the child or will obtain a tawiz from the mullah. The tawiz is either hung around the neck or pinned to the child's clothing. A ziarat (shrine of a holy man) may be visited by the child and the family. Not having enough milk and her milk being bad from sickness or another pregnancy are other reasons given by Afghan mothers for their children becoming thin. The mother or mullah may decide to put the child on a limited diet (parhaiz) of bread and milk or tea to restore the balance to the thin

child's system. Other food will not be given even if the child has an appetite for it. These limited diets can last for several months at a time. Tawiz is mentioned in the Quran but parhaiz is not.

Good diet for the child under 2 years		
The first 4 months	*From 4-12 months*	*From 12-24 months*
Breast milk alone	*Breast milk* *Soft, mashed food*	*Breast milk* *Same food as the family*

By the age of 1 year the baby should be getting a good, mixed diet containing vegetables, fruit, grains, meat, and milk.

Some of the traditional recipes like kidjiri (rice and dahl), and shorwar (bread soaked in milk or meat soup) are very good because they contain both growth and energy food. Some of the others like suji (watery rice or maize flour porridge) or mashed potatoes need to be mixed with other food like dahl because they only contain energy food.

If the family plants a vegetable garden they will have salad and vegetables. Some of these, such as tomatoes, can be dried and kept for the winter when fresh vegetables are scarce. If they keep chickens they will have a regular supply of eggs. Adding a teaspoon of oil to every serving is very good for energy.

Introducing supplementary food at 4 months

A mother's breast milk does not provide all the nutritional needs of a 4 month old baby. The baby should now be given some solid food. This does not mean that breast feeding should stop. Breast feeding must continue.

The first food given to the baby should be *very soft* and warm. It should be fed to the baby with a small, clean spoon. Put the spoon of food on top of the baby's tongue and let the baby suck it off. Any of the following foods may be used:

- Very well boiled and mashed wheat, rice, dahl, maize (porridge)
- Mashed potatoes with a little oil
- Soft-boiled eggs
- Green vegetables boiled in a little water and then mashed with the same water (this water contains many good things and should not be thrown away)
- Mashed banana

Introduce only one new food at a time. Start by giving 1 small spoonful and increase gradually to 6 spoonfuls of the same food. After a few days on this food, try another food, and go through the same process. Always give the solid food before breast feeding, when the baby is hungry.

Tell the mother that the baby might become a little constipated or have some loose stools because of the new food, but reassure her that this is quite normal. Some mothers use this change in bowel habits as a reason for not giving supplementary food frequently enough to the baby. They say that the new food upsets the baby's system and are reluctant to give it.

The VHSs should remind mothers that it takes a long time to learn how to do new things like sitting without support and walking. In the same way, the baby has to learn how to chew the food and then swallow it. At first, the baby may spit the food out, not because it does not like it, but because it cannot control the food and it just falls out.

The mother must be patient and not give up. By 6 months the baby should be eating 6 spoonfuls of food, 4 times a day before breast feeds. The baby should also be having at least 2 breast feeds without food. The mother will see that by 6 months the baby is able to eat all the food she offers. If the child is sick this food should be continued. If the child is thin, extra oil can be added.

By 12 months of age the baby will be able to eat the same food as the family but without spices. Oil can be added to every meal to give the baby plenty of energy. If the mother takes her baby to be weighed every 1 to 2 months at the clinic she will be able to see how well the baby is growing with the food she is giving.

The story of Subiya and her baby

Subiya married 2 years ago and moved many miles away from her father's house. She remembers sadly how she used to play with her brothers and sisters in the beautiful garden full of apricot and apple trees. She has had problems settling into her new home because all the other women are much older than her and keep telling her what to do. She is expected to bake the bread and do most of the cooking. Her only friend is Kala Jan, the newly trained VHS, who comes to visit her regularly to check on her baby. After the delivery she arranged for Subiya's baby to be vaccinated.

Now her baby is 4 months old. Kala Jan shows her how to mash some potatoes and give them to her baby with a clean cup and spoon. The other women are really shocked by this and tell Subiya that her baby is far too young to digest the food. Food should be started when babies are at least one year old, they say. When her baby starts having slightly loose stools the women nod their heads wisely and say, "We told you this would happen. You should have waited until she had teeth and could reach for the food." But Kala Jan reassures Subiya that the loose stools are quite normal and suggests that she start trying some other food like mashed vegetables, porridge, and bread soaked in milk. Subiya follows Kala Jan's advice and is delighted to see that her 6 month old daughter is now nearly as big as her mother-in-law's 10 month old son, Munir.

Subiya's sister-in-law has just got engaged and the family plans a big engagement party. Many guests come and all the women of the house are very busy preparing food and serving tea. One of the guests has to leave early because the child he brought with him is sick with a fever and cough. Two weeks

after the party all the children in the house, apart from Subiya's daughter, start coughing. The children are sick for a long time and the clinic staff tell them that they have whooping cough. Subiya's mother-in-law is very unhappy because her baby son, Munir, is becoming very thin and keeps vomiting up milk after bouts of coughing. She sees that Subiya's baby is well and comes to ask for some help. Subiya explains that the baby needs to eat food to fight the sickness and shows her how to prepare some soft food, adding a little oil to it. At first Munir, who is very weak, refuses to eat the food. Subiya explains that this is because he has to learn how to chew the food and she must just be patient and keep trying. Slowly Munir puts on weight and starts smiling and taking an interest in things around him. The whole family is delighted and tells Subiya that from now on they will take all the children to be vaccinated from birth and start feeding them at 4 months. Subiya becomes much happier in her new home and stops feeling so sad when she thinks about her father's house and beautiful garden.

Ask the VHSs why Munir and the other children apart from Subiya's daughter became sick with whooping cough.

Islamic quotation

- *Weaning should only start after the agreement of both the father and the mother. If they both agree on weaning by mutual consent, there is not blame on them.* **Surat 11 (Bagara) Verse 233.**

CHAPTER 19

Common Cold and Pneumonia Module

LEARNING OBJECTIVES

By the end of this session, the participant will be able to:

1. Teach the prime messages relating to Common Cold and Pneumonia to a VHS, appropriately using training materials;
2. Describe to a VHS 5 actions a person can take to prevent common colds and pneumonia in children.
3. Explain to a VHS in simple language what pneumonia is and why it is dangerous.
4. Teach the VHS how to recognize the signs and symptoms of pneumonia, as well as the information and actions necessary to make a successful referral.
5. Explain to a VHS in simple language what a common cold is.
6. Teach the VHS how to care for a child with a cough and common cold.

Prime Health Messages

1. Prevent pneumonia by making sure babies are breast fed for at least the first 4 to 6 months of life and that children are well-nourished and fully immunized. Five actions you can take to **prevent pneumonia and colds** in infants and children are:
    a. Breast feed
    b. Give foods rich in vitamin A, such as orange or yellow fruits and dark green leafy vegetables
    c. Immunize
    d. Keep healthy children away from a sick child; do not have healthy children sleep with a sick child; do not share the food of a sick child with other children
    e. Ask a person who coughs to cover his mouth when coughing
2. **Pneumonia** is the name of a dangerous disease caused by germs (microbes) in the lungs (chest). It is **dangerous** because the child cannot breathe easily.
3. **Signs and symptoms of pneumonia** are:
    - cough
    - rapid breathing
    - the lower part of the child's chest goes in as the child breathes instead of going outward, as normal
4. If a child with a cough is breathing much more rapidly than normal, or if the lower part of his or her chest is drawing in, **immediately refer** the child to the nearest qualified health provider (BHW, nurse, or doctor).
5. **Common cold** is the name for a simple (**not serious**) sickness that is in the nose and throat.
6. Signs and symptoms of a cold are:
    - coughing
    - sneezing
    - watery discharge from the nose

    Colds spread easily from one person to another. Common cold appears usually during cold weather.
7. A child with common cold needs **home care**, but not medicine. If your child has a cough or cold, give the following home care:
    - Continue breast feeding and feeding
    - Help the child to drink plenty of clear fluids (as much as she or he will drink)

- Keep the child warm but not hot, in a room with clean air (without smoke)
- Clean the child's nose, especially before breast feeding. Wipe out 1 nostril at a time

8. If a child with a common cold begins to show any signs of pneumonia (see #3 above), or if the child has a cough for more than 14 days, **refer** the child to a qualified health provider.

EXERCISES

EXERCISE 1

ACTIONS TO PREVENT COMMON COLD AND PNEUMONIA

CIRCLE STORY TELLING BY ROLE PLAY OR PICTURES

Directions: Ask the group form a circle. Select one person to act out an action that prevents common cold and pneumonia. Everyone else in the group guesses which action is being demonstrated. Go around the circle having each person act out an action. If the group is large, divide into circles of 4 or 5 people. Alternatively, ask everyone in the group to draw a picture of an action that prevents common cold. Ask the group to form a circle. Go around the circle so that each person shows their picture and the others guess which action has been drawn. Discuss some of the constraints of preventive actions, such as keeping a sick child away from others under overcrowded conditions.

Time: 30 minutes

Materials: No materials needed for role play; flip chart paper, and markers or crayons for picture exercise

EXERCISE 2

THE DIFFERENCE BETWEEN SIGNS AND SYMPTOMS OF COMMON COLD AND PNEUMONIA AND RESPECTIVE TREATMENTS

LARGE GROUP ROLE PLAY

Directions: Select 3 people to carry out the role play in front of the entire class. At the conclusion of the role play, discuss whether the VHS's explanations and instructions were correct, whether the VHS was effective in convincing the mother and mother-in-law about the need to immediately seek more sophisticated medical treatment, and plans for quickly and effectively referring a sick child.

Roles: 1 VHS, 1 Mother, 1 Mother-in-law

Situation: A VHS comes to visit her neighbor. The young mother in the household asks the VHS to look at her son because he has been sick for 10 days with a bad cough. The mother-in-law tells her daughter-in-law not to worry because the

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child only has a cold. The VHS, however, notices that the child is breathing very rapidly. When she examines the child more closely, the VHS notices that the lower part of the child's chest is going in as the child breathes instead of expanding outward. The VHS explains the difference between symptoms of common cold and pneumonia. She explains that they should be treated differently and the child must be quickly taken to a doctor or nurse. The daughter-in-law explains that the bus to the doctor's private clinic is very expensive, and since it will soon be dark, they will not be able to walk so far. The VHS explains that the child is in danger and she offers some alternatives for seeking treatment.

Time: 30 minutes (15 minutes for role play, 15 minutes for discussion)

Materials: None

EXERCISE 3

REFERRAL OF A CHILD WITH PNEUMONIA

STORYTELLING WITH DISCUSSION

Directions: Tell the "Story of Shami and his Baby Sister," which is in the reference pages of this Common Cold and Pneumonia module. During the story, stop and ask the VHSs what Shami's mother should do as signs of the illness appear. (See discussion questions accompanying the story.) Discuss participants' real life experiences.

Time: 20 minutes

Materials: Story of Shami and his Baby Sister

EXERCISE 4

HOME CARE FOR A CHILD WITH COUGH OR COLD

PAIRED ROLE PLAY WITH DEMONSTRATION

Directions: Divide the group into pairs. Ask each pair to role play the situation below. The exercise can end in a large group role play with 1 or 2 of the pairs demonstrating in front of the large group. Discuss the practicalities of providing home treatment for a child with a common cold. Emphasize the signs and symptoms which the parents should watch for.

Roles: 1 Husband, 1 Wife

Continued

Continued

Situation: A husband and wife have a sick child with a cough. The husband and wife have learned from their relative, who is a VHS, how to provide home treatment for a child with a cough. The husband and wife discuss and demonstrate the actions for proper home care of their sick child.

Time: 35 minutes (15 minutes for paired role play, 20 minutes for large group role play and discussion)

Materials: Doll; tissues or clean cloth

REFERENCE PAGES

Afghans use a variety of methods for treating coughs, including pulling on the throat and covering the chest with cotton. Herbal mixtures are also popular.

Coughing is a sign of sickness in the throat or lungs. Most coughs are due to infections in the throat and are not very serious. Coughs from infections in the lungs are serious and the child can die or become very sick. Coughing is the body's way of clearing mucus and microbes from the airways to help breathing. Buying expensive cough syrups from the bazaar to stop the cough is not good because they suppress the protective cough reflex. Honey and lemon drinks are very good. If a small baby's nose is blocked, it must be cleared before breast feeding. If the nose is blocked, the baby may have difficulty sucking. The mother can clear the nose with a clean twisted cloth. When a cough goes on for more than 2 weeks, this may mean that the child has TB microbes in the lungs. The child should be examined at the clinic and his weight should be plotted on a growth chart to see if he is losing weight.

Children with fast noisy breathing

A healthy baby makes no noise when breathing in or out. A child with noisy and fast breathing has a serious disease of the lungs. Another sign of disease is when the space between the ribs is drawn in each time the baby breathes. This symptom can come on very quickly, in a few hours or days, and may follow on from a head cold, throat infection, measles, or whooping cough. This is very serious and the child must be referred urgently to the clinic for special treatment.

The story of Shami and his baby sister

This is the story of Shami and his baby sister whom he loves dearly. Shami is a very bright student who is always at the top of his class. He has a favorite aunt, Kala Jan, the newly trained Volunteer Health Sister, and spends hours sitting with her listening to the stories she was told during her training. Some of them are very funny, but many of them are sad and Shami hates hearing about children dying. He has decided that when he grows up he will be a doctor and stop all these children from dying.

Shami has three younger brothers and sisters and is always busy looking after them, playing with them, and making toys. Kala Jan has told him that all these activities and toys are very good for their brain growth and development. "The sooner they develop, the sooner they can play volleyball with me," Shami thinks to himself. He enjoys playing with his baby sister most of all. She is fat and pink and beautiful, just like a peach. He is very proud of her because she has started sitting 3 months ahead of other babies in the house. "Her brain must be very big," he thinks proudly. He has started a little vegetable garden with seeds given to him by Kala Jan. He is saving up to buy some chickens, but it seems to be taking him a long time.

One day his baby sister starts suffering from a small cough and a runny nose. Her nose becomes blocked and she has difficulty sucking at her mother's breast.

Ask the Volunteer Health Sisters what should be done about the blocked nose.

Shami's mother gently clears the baby's nose with a small piece of twisted cloth, using the method shown to her by Kala Jan. The baby is then able to breast feed. A few hours later she develops a fever.

Ask the Volunteer Health Sisters how Shami and his mother should treat the fever.

Shami's mother takes off the baby's clothes and Shami runs to get a bowl of cool water in which to lay her. He grabs his mother's fan and starts fanning his sister while she is sitting in the bath. Her fever starts to go down. They give her some herbal tea and a few spoons of kidgiri with oil. Shami's mother continues to breast feed her. A few hours later the fever comes back again and she starts making strange noises as she breathes in and out. Her breathing gets faster and faster.

Ask the Volunteer Health Sisters what Shami's mother should do now.

Shami remembers that Kala Jan has told him a story about a baby girl who got very sick with fast breathing like this and had to go to the clinic urgently. He looks at his sister for a few minutes and decides that she also needs to go to the clinic. He goes to find his mother and father to explain his idea.

His parents think Shami is right. Shami's mother also remembers the story Kala Jan told the family and feels very frightened for her little daughter, so they take the baby to the clinic. The clinic staff examine her and explain she has a very serious chest infection which needs special injections, but they congratulate Shami's father for bringing her just in time. "Don't congratulate me, it is Shami who has become the family doctor." The clinic staff look very impressed. "Who is your teacher?" they ask. "Kala Jan, my aunt," Shami replies proudly. His little sister is ill for a few hours and her breathing is fast and noisy. The clinic staff explain that it will take a few hours for the injection to work. "That is because it has to fight the microbes," Shami says. "We will all go home and let you take over the clinic. We all need a good holiday," the clinic staff say, laughing. Shami's sister starts getting better; her fever and breathing are coming back to normal. They are able to take her home and then bring her back the next day for more treatment.

"Well done, son," Shami's father says, "I think I will give you the rest of the money for that chicken you keep pestering me about." "Good," says Shami happily, "give me enough money for 2 and I will start fattening one up to give to Kala Jan for Eid."

Ask the Volunteer Health Sisters what the different steps are for treating a child with runny nose, fever, and fast, noisy breathing. Discuss the feedback they have had from telling stories like this to their families and during home visits.

CHAPTER 20

Safe Motherhood Module

Learning Objectives

By the end of this session, the participant will be able to:

1. Teach the prime messages relating to Safe Motherhood to a VHS, appropriately using the VHS flip chart
2. Teach the VHS, in simple words, why it is important to space pregnancies at least 2 years apart and why women under age 18 or over age 35 should avoid pregnancy
3. Teach the VHS 2 natural methods to space births and explain where a woman can go to obtain other methods (such as pills)
4. Explain to a VHS why it is important for women to go to the nearest trained health worker for regular check-ups during pregnancy
5. Explain to a VHS why pregnant women need more rest and more food than usual, as well as demonstrate examples of a well-balanced diet rich in vitamin A and iron
6. Explain to the VHS why tetanus toxoid is important for pregnant women, how many tetanus vaccines are needed for protection, and when the tetanus vaccines should be given
7. Teach the VHS to recognize danger signs during pregnancy and delivery which require immediate care from a qualified health provider, and warning signs which require a referral to an MCH Clinic
8. Teach the VHS the actions needed to prevent anemia; teach her to recognize the signs and symptoms of anemia and how to refer cases for treatment
9. Teach the VHS that all family members, especially the decision-makers, should know the danger signs and warning signs during pregnancy and childbirth and where to seek care for these signs. Emphasize that, if any of these danger signs appear, the pregnant woman must be taken to the nearest qualified health provider immediately
10. Help the VHS identify trained health workers in her area from whom pregnant mothers can get perinatal assistance (before, during, and after the birth) so they can have a safe and clean delivery
11. (Optional: Teach a VHS how to give proper cord care after a delivery)

PRIME HEALTH MESSAGES

1. Too many **pregnancies spaced close together can be dangerous**. wait at least 2 years after the baby is born to allow the mother's body to get strong enough to make a healthy baby. Avoid pregnancy if you are under age 18 or above 35, because very young or old mothers are more likely to have problems making healthy babies.

2. Breast feeding and using the "safe time" are natural methods which help **space births**. Most MCH Clinics offer other methods for spacing births. (Note: Use the information in the Safe Motherhood module Reference Pages to describe the "Safe Time" method and other forms of contraception.)

3. As soon as a woman suspects she is pregnant she should go to the nearest clinic, MCH Officer, or nurse-midwife to plan **prenatal care** check-ups. A pregnant woman should have a prenatal check-up at least once every 3 months or at any time there is a problem.

4. Pregnant women need **extra rest and extra food** for growth and energy throughout pregnancy, but especially during the last 3 months before birth -- for themselves and their unborn babies. A good diet for a pregnant woman includes:

   a. Body-building foods: bread, rice, peas, nuts, dahl, milk, eggs, and meat

   b. Foods to make the baby grow well: bread with dahl, beans or peas

   c. Foods which provide extra energy: fats and oils

   d. Foods rich in vitamin A: Dark green leafy and yellow vegetables and fruit (spinach, carrots, pumpkin, melon, apricots, oranges).

   e. Foods rich in iron to prevent anemia: liver, green leafy vegatables

   (Note: Reinforce prime messages #6, #7, and #8 from the Nutrition module.)

5. Immunizations are important for all women. A mother needs to receive **5 tetanus immunizations** throughout her life to fully protect her (and her babies) from tetanus. If a woman has not received 5 tetanus immunizations, she should get immunized as soon as she knows she is pregnant. If a pregnant woman has never received a tetanus immunization, she will need at least 2 during pregnancy. (Note: Reinforce Immunization module prime messages #5, #8, #9.) Do not wait until the time of delivery to get the tetanus vaccine because that is too late for you and your baby.

6. **Danger signs** during pregnancy and delivery which **require immediate care from a qualified health provider** (e.g. nurse-midwife, doctor) are:

   - Bleeding from the vagina during pregnancy
   - Severe headaches
   - Severe vomiting

- High fever
- Severe stomach pain before the 8th month
- Labor lasting more than 12 hours
- Heavy bleeding after delivery

7. Other "**warning signs**" which require extra care and regular visits to a health worker during pregnancy are:
   - Pregnant woman has had less than 2 years since the last birth
   - Pregnant woman is less than 18 years or more than 35 years old
   - Pregnant woman has had 4 or more previous children
   - Pregnant woman has previously had problems (such as a very long labor, a baby born too early, or a cesarian birth)
   - Pregnant woman has previously had a miscarriage, abortion, or stillbirth
   - Signs of edema: unusual swelling of legs, arms, or face
   - Signs of anemia: paleness of inside eyelids which should be red or pink (**Note:** See Safe Motherhood prime message #8 below.)
   - Signs that germs are making the pregnant woman sick, such as fever, pain on urination, or bloody diarrhea.
   - Fainting
8. **Anemia** ("thin blood") is a condition which can cause difficulties in labor if not treated. Signs and symptoms of anemia are paleness of inside eyelid, pale skin, and weakness. Prevent anemia by eating a well-balanced diet rich in iron (liver; green, leafy vegetables) and by getting regular prenatal check-ups.
9. **All family members,** especially the decision-makers, should **know the danger signs and warning signs** during pregnancy and childbirth and know where to seek care for these signs. If any of these signs appear, **take the pregnant woman to the nearest qualified health provider immediately.**
10. The pregnant woman should ask a **trained health worker** (nurse-midwife, MCHO, or Female Health Worker) to assist in the delivery because a trained worker can provide a safe and clean delivery. During prenatal check-ups, you can ask who in the area is well-trained; arrange for help from the trained health worker.
11. (**Optional**: Clean Cord Care)

    Anyone assisting in a delivery should practice the **cleans: clean hands, clean surface, clean instruments, clean coverings.** In a home delivery, to properly care for the cord immediately after delivery:

    a. Wash hands with soap and water (remove all jewelry, roll or pin sleeves of your dress up) prior to the delivery.

b. Prepare clean instruments by boiling a razor blade and at least 3 pieces of thread (prepare some extra in case 1 gets lost or dirty); let them cool by placing on a clean surface, prior to the delivery.

c. When the baby is born, wait until the cord goes white and thin and stops pulsating.

d. Take 3 pieces of a clean thread and tie 3 knots at this distance from the baby:

   1st: 2 fingers width

   2nd: 3 fingers width

   3rd: 4 fingers width

e. Tie them tight to stop any bleeding.

f. Pick up sterile razor blade, but do not touch the cutting edge.

g. Cut the cord between the second and third knot.

Do not put anything on the cord (such as kohl, ashes, or henna).

EXERCISES

EXERCISE 1

ACTIONS TO PREVENT PROBLEMS IN PREGNANCY AND CHILDBIRTH

STORY TELLING WITH DISCUSSION

Directions: Tell the story of Delbaro. Discuss the story with the group in terms of the prime messages: Why is childspacing important? Why do you think Delbaro died? What could have prevented Delbaro's death? If you were a VHS visiting Delbaro and her mother-in-law before Delbaro was pregnant, what advice would you give? If you were a VHS visiting Delbaro and her mother-in-law while Delbaro was pregnant, what advice would you give? Why is it important that all family members know about safe motherhood, especially about danger signs and warning signs?

Story of Delbaro

Delbaro, a 25-year-old woman, has five daughters but no son. She has often being blamed for not having a son. Her mother-in-law used to tell her "All of my daughters-in-law have sons except you. If you don't bear a baby son this time I will get my son to marry someone else." Delbaro resented such behavior. She became pregnant once again. The baby was growing larger and larger inside her while she herself got weaker and weaker, as she was afraid of giving birth to a sixth daughter. She was also suffering anemia, but her mother-in-law insisted that she had jaundice and advised her not to take any kind of food except bread and tea. She also took her to different Mullahs and got her several amulets, but nothing worked. Finally, the period of waiting ended and Delbaro bore a son. But she herself left her family forever, as she died because of anemia.

Time: 25 minutes

Materials: Story of Delbaro

EXERCISE 2

THE IMPORTANCE OF CHILD SPACING

GROUP AND PAIRED ROLE PLAY

Directions: Select 2 persons to do a role play in front of the group. After the large group role play the large group should give a critique. Discuss whether the VHS gives correct information in an acceptable manner. Then divide the group into pairs to practice the same situation.

Continued

Continued

Roles: 1 VHS, 1 Pregnant Woman

Situation: The VHS is making a home visit to the home of a neighbor who has recently given birth to her fifth child. The woman is only 25 years old; she does not want to have another baby again soon. The VHS explains how to space births so that she can become strong again. The VHS tells her about natural methods a woman can use and tells her to go to the MCH clinic if she wants some medicine like pills to space births.

Time: 35 minutes (20 minutes large group role play and discussion, 15 minutes paired role plays)

Materials: None

Exercise 3

Warning Signs to Reduce Dangers of Pregnancy and Childbirth

Picture Game

Directions: Divide the group into 3 subgroups with 3 to 6 people in each subgroup. In the first subgroup, ask each person to make a simple sketch depicting danger signs which require immediate help. In the second and third subgroups, ask each person to sketch a picture depicting warning signs during pregnancy. When the subgroups have completed their pictures, return to the large group. Each group will present their pictures with a few words of explanation. Ask everyone in the class if there were any other danger signs or warning signs which were not drawn.

Time: 35 minutes (15 minutes to draw, 20 minutes presentation and discussion)

Materials: Paper; markers or crayons

Exercise 4

Signs and Symptoms of Anemia

Story Telling With Discussion

Directions: Tell the story of Gul Shireen. Discuss: What are the signs and symptoms of anemia? How can you prevent anemia? Why it is important for everyone in the family to know about anemia? What should you do if you have anemia? How can anemia be treated?

Continued

Continued

The Story of Gul Shireen

Gul Shireen, a 16-year-old bride, lived with her husband and in-laws. After some months she became pregnant. One day Karima, her aunt's daughter who was working in a health post, told her that in order to have a normal and safe delivery as well as a healthy child, she should register at the clinic. However, her mother-in-law strongly disagreed and said to Gul Shireen, "I have had 10 home deliveries so far. In those days there was neither a hospital nor a clinic. Don't listen to what Karima says, or you will be misled." Gul Shireen accepted her advice and did not go to the clinic.

Eight months passed. Once while cooking, all of a sudden, she lost consciousness and fell on the ground. Her mother-in-law rushed to her and poured some water on her face. Gul Shireen opened her eyes and complained that every morning when she got up she had nausea, vomiting, dizziness, and a severe headache. She added, "By the way, Mother, have you noticed that my feet are swollen?" "No they aren't, my dear," replied her mother-in-law, "you have got a little fat," and laughed. The same thing happened several times. Karima, the health worker, asked Gul Shireen again and again to go to the clinic before it was too late.

But the mother-in-law did not let her go. Instead she took her to mullah who gave her amulets. One day the mother-in-law was shocked to see Gul Shireen lying in the yard. She called in Karima to see what was wrong with her. Soon afterwards Karima found that both Gul Shireen and the baby inside her had lost their lives. She was reduced to tears and sadly said to the mother-in-law, "I'm so sorry, but it is too late..."

Time: 25 minutes

Materials: Story of Gul Shireen

EXERCISE 5

DELIVERY BY A TRAINED PERSON

QUESTION AND ANSWER

Directions: Ask the group what an **untrained** birth attendant usually does: When a woman's labor has gone on for too long (more than 12 hours)? To keep the birth clean? To cut the cord? If the baby is being born in the wrong position? If too much blood is being lost? If expert medical help is needed? If the baby does not begin breathing right away? To help the mother to start breast feeding? To dry and keep the newborn baby warm? To help the mother prevent or postpone another birth? Ask the group: Why is it important for a trained person to assist at every birth?

Continued

Continued

Time: 20 minutes

Materials: None

EXERCISE 6

SUMMARY OF SAFE MOTHERHOOD

PAIRED AND GROUP ROLE PLAY

Directions: Divide the group into pairs to enact a role play of a VHS teaching a young relative about safe motherhood, using the safe motherhood flip chart. After each pair performs the role play, the individuals will switch roles so that each person can practice being the VHS. At the conclusion of the paired exercise, ask 1 group to perform the role play in front on the entire class. The class will provide a critique of the content and teaching methodology.

Roles: 1 VHS, 1 young woman (17 years old)

Situation: The VHS has a niece who will soon be getting married. She adores her young niece, and so shares with her the knowledge she has gained as a VHS. The VHS uses the safe motherhood flip chart to teach her niece.

Time: 50 minutes (25 minutes for paired role play, 15 minutes large group role play, 10 minutes critique)

Materials: Safe motherhood flip charts for each pair

EXERCISE 7

CLEAN CORD CARE

LARGE GROUP AND PAIRED GROUP DEMONSTRATION

(**Optional:** This exercise should be performed if "clean cord care" has been one of the teaching objectives.)

Directions: Ask 2 people to demonstrate "clean cord care" in front of the entire class. The class will provide a critique of the content and teaching methodology. Then, divide the group into pairs so that each person can practice "clean cord care" using a doll as their partner observes.

Time: 45 minutes (15 minutes per demonstration)

Materials: Doll with cord, boiling pot, thread, sterile razor, clean plastic cloth

REFERENCE PAGES

The work of the trained VHS involves teaching women about **the protections** which prevent sickness in pregnant women and unborn babies. Help VHS remember these by using 5 fingers of one hand, and then explaining this is like a hand helping them along the dangerous road of pregnancy. You can explain that the protections work rather like tawiz and give protection against sickness.

The Protections

- *Cleanliness*
- *Vaccinations.*
- *Referral of danger signs*
- *Good diet*
- *Clinic visits*

Good diet for the pregnant woman

Pregnancy is hard work and the mother needs extra food for growth and energy both for herself and the unborn baby. She needs body building food like bread, rice, peas, beans, nuts, dahl, milk, eggs, and meat. Bread combined with dahl, beans, or peas will help the baby grow very well. Fats and oils provide extra energy. Dark green leafy and yellow vegetables and fruit are good. Leaves, spinach, carrots, pumpkin, melon, apricots, and oranges help the eyes, skin, and blood stay healthy.

Women who are pregnant or breast feeding need some animal foods such as eggs, milk, and meat to go with the bread for growth and to make the blood strong. This kind of food is often expensive and difficult for the family to provide. The pregnant woman needs this type of animal food more than the men and older women in the family. The men have stopped growing and do not need this kind of food as much as the baby growing inside the pregnant woman. The VHSs will have to explain this to the older women and men in the house. The tradition is for the younger women to eat what is left by the men and older women. The VHSs should discuss changing this practice with the family so that everyone can have proper nutrition. They could also suggest that the family plant a vegetable garden and keep chickens for the eggs.

If a woman has had several children who died at birth, she may believe the cause is a food allergy and she may be advised to eat only bread and tea during her next pregnancy. This practice is called parhaiz and is usually prescribed with a tawiz by the mullah. Women often believe that the tawiz will not work without the parhaiz. It may take the VHSs several home visits to convince women to eat a full diet again. The VHSs can decide on a cheap, locally available mixture of "hot" and "cold" food to provide a good balanced diet. You should find out which food is considered hot, cold, and badi (windy) by your VHSs. Badi food and eggs tend to be avoided in pregnancy. However, pregnancy is not considered a hot or cold state and a special diet is not traditionally recommended.

Tetanus vaccine for women

Every woman between the ages of 15 and 44 should be fully immunized against tetanus. Tetanus germs grow in dirty cuts; for example, if an unclean knife is used to cut the umbilical cord or if anything unclean (kohl, ghee) is put on the stump of the cord. If the tetanus germs enter the body, the tetanus germs can kill.

Mothers can protect themselves—and their newborn babies—against tetanus by making sure they are immunized before or during pregnancy. A mother needs to receive 5 tetanus immunizations throughout her life to fully protect her (and her babies) from tetanus. If a woman is not already immunized, she should go to a clinic for tetanus vaccine as soon as she knows she is pregnant. The first 2 shots of tetanus vaccine should be given as soon during her pregnancy as possible, 1 month apart. The remaining 3 shots should be given in the next 3 years (1 per year).

Prenatal clinic visit

Pregnant women, especially those with danger signs of women at risk, should be encouraged to visit the prenatal clinic at least 3 times during their pregnancy. These visits will be to give 2 tetanus vaccinations a month apart, and to check the position of the baby in the last 3 months. Three times is the absolute minimum and it is better if the pregnant woman can visit the clinic more frequently than this.

Prenatal care is important for all pregnant women to:

- Arrange for the delivery to be supervised by a VHS
- Improve nutrition through dietary advice
- Prevent tetanus by vaccination of women
- Prevent and treat anemia by giving daily tablets
- Detect and refer pregnancies with danger signs

How the baby grows

The baby is fed by blood from the mother coming to the placenta and cord. Medicines, syrups, and injections can pass to the baby from the mother, which is why the mother should only take medicines prescribed by the clinic staff, who know which medicines are safe for the unborn baby. If the mother does not eat enough food for herself and the unborn baby, the baby will not get enough food to grow to normal size in the uterus. A pregnant woman who works too hard will not have enough food for the baby. To make sure that a baby will grow well and strong, all pregnant women should rest more and do less work than usual. Men must remember that pregnancy is hard work for women.

The baby floats in special water which protects it from injury and allows it to swim around. These are the movements the mother can feel from the 5th month of pregnancy onwards. The baby slowly grows inside the uterus, getting food and air from the cord and placenta. At 4 months before delivery the baby is at the level of the umbilicus and at 1 month before delivery at the level of the sternal notch. Nine months after the last period, the baby is ready to live outside the mother's body. So the cervix, let us call it the door of the uterus, slowly opens. This is called labor.

Minor problems of pregnancy

The VHSs should reassure pregnant women with these minor problems that they are not a sign of sickness and they do not need medicine for them. They are a normal part of pregnancy.

Morning sickness

Many women vomit in the morning during the first 2 or 3 months of pregnancy. This is just a normal sign of the body adjusting to pregnancy. Advise pregnant women to avoid eating big meals, and to eat smaller amounts more frequently throughout the day. They should avoid taking fluids with the meals, and drink them in between meals instead. They should eat some bread or biscuits on waking, as this often stops the sickness. Medicines are not required for morning sickness because they do not help and they damage the baby. If the vomiting gets worse and the women start losing weight, they should be checked at the clinic.

Constipation

This is very common in pregnancy. The black tablets given by the BHC to make the blood strong can often cause a little constipation. The treatment for constipation is to eat things that will make the stools softer like oil, fresh fruit, and vegetables, and to drink plenty of fluids. Strong laxatives should be avoided.

Heartburn

Heartburn is due to the stomach making too much acid. Greasy and spicy foods make the stomach produce too much acid and should be avoided. Milk is good because it stops acid. Sometimes the heartburn is more severe when lying down and can be reduced or prevented by sitting up. Medicines are not required for heartburn.

Swollen feet

Women's feet may swell, especially in hot weather or during the last 3 months of pregnancy. To find out whether the feet are swollen, press the skin of each ankle with the thumb. If the point over which you press becomes a small pit which does not go away quickly, the feet are swollen. If the woman has no other problems, advise her to rest her feet up. If she also has swelling of hands or face, headaches, or blurred vision (these are danger signs) she must be checked at the clinic urgently for high blood pressure.

Danger signs in pregnancy

One of the trained VHS's main roles will be to look for danger signs in pregnancy and in babies and to know how to manage them. Even the traditional Afghan dais do not recognize these signs as dangerous, and therefore do not take any action to respond to them. In fact, they think some danger signs, like too much bleeding after delivery, are very good for the mother. You will have to use stories, picture cards, and a lot of repetition to help VHSs understand danger signs.

The 2 main points to emphasize to the VHSs are:

1. Always look for danger signs during a home visit to a pregnant woman.
2. Always take action if you find danger signs. This action includes referral to the clinic.

There are some danger signs that need to be checked for throughout pregnancy.

The Danger Signs in Pregnancy

- *Fever*
- *Swelling of hands, face, and feet*
- *Bleeding*
- *Evidence of previous difficult labors such as a Caesarian section scar*
- *Abnormal positions of baby (breech, oblique, or transverse)*
- *Twins*

Fever

The fever is due to microbes fighting in the mother's body. Any microbe in the mother can also pass to the baby through the placenta and cord. These microbes can stop the baby growing or even cause an abortion or stillbirth. For example, malaria microbes can do this if the mother is not treated quickly with a full course of tablets from the clinic. The VHS must refer every pregnant woman with a fever to the clinic, if the fever cannot be brought down with extra fluid and sponging with tepid water after the first day.

Swelling of hands, face and feet

The woman may notice that her ring feels tight or her feet are swollen. If the woman has swelling in 2 or more places she must have her blood pressure checked at the clinic. If her blood pressure is high the clinic will also check her urine for protein. A woman with swelling, high blood pressure and protein in the urine has pre-eclampsia (PET). She may also have headaches and blurred vision. If she is not referred urgently to the hospital for treatment she will have fits and may die. Afghan women die from eclampsia because they are not referred to the clinic.

Bleeding

Bleeding is always a danger sign whether in pregnancy, during labor, or after delivery. Afghan dais do not even recognize bleeding as a danger sign. They treat it by tying a cloth around the waist of the woman or by giving tawiz and herbal mixtures.

Bleeding in early pregnancy

This is before the baby has started to move and is usually due to an abortion. As abortion is when the door (cervix) of the uterus starts to open in early pregnancy. If the door opens too wide the baby falls out. If the bleeding is very slight and not painful, then the VHS can advise the woman to rest in bed 1 day. This means the door is only slightly open. If the bleeding gets worse with a lot of pain in the lower abdomen, then the woman should be referred to the clinic. This means that the door is wide open and she is going to lose the baby.

Bleeding in later pregnancy

This is defined as bleeding after the mother has started to feel the baby move. Bleeding after that stage is very dangerous and the woman must be referred to the clinic or hospital urgently. The bleeding could be due to the placenta lying over the door of the uterus so that it is blocking the baby from coming down. As the door of the uterus starts to open, the placenta will bleed more and more. The mother can die of heavy bleeding.

*The Life Saving Treatment for **Heavy Bleeding***

- *Send for help*
- *Lie the woman flat and raise her legs on a pillow*
- *Give lots of fluids*
- *Use perineal pads to control blood loss*

Obstructed labor

Obstructed labor can occur when the hips are too narrow. The woman will have strong contractions for more than 24 hours with no progress of the labor. Her narrow hips stop the baby from coming down. An urgent caesarian section operation is required to deliver the baby alive.

Previous caesarian delivery

A woman with a caesarian section scar has a permanent weakness in her uterus. If she has prolonged labor again, this will weaken the scar even more, with a danger of the scar splitting open. If this happens the mother and baby will die. All women with caesarian section scars should deliver in the hospital, so that if there are any danger signs of a prolonged labor (more than 24 hours) the doctors can do an urgent caesarian section and prevent splitting of the old scar.

Heavy bleeding after delivery

Heavy bleeding after delivery occurs when the uterus has not contracted strongly enough to stop the bleeding inside the uterus. This is more common in women who have had many pregnancies or a twin pregnancy, where the uterine muscle is weak from excessive stretching.

Retained placenta

A placenta is retained when the placenta sticks too firmly to the wall of the uterus and is not pushed away when the uterus contracts down after delivery. Women who have this problem before are likely to have it again and should be referred to the clinic.

Women with a history of difficult deliveries

If a woman has had any of the preceding delivery problems before, she is likely to have them again. The VHSs can detect this by asking the woman if she previously had to go to the hospital for any delivery problems and by examining her abdomen for caesarian section scars. The VHSs should

accompany or send these women to the clinic. The clinic staff may decide it is safer to send these women to hospital for delivery.

Birth spacing

When a woman has frequent pregnancies with little time between them, she becomes weak and anemic. Her babies are more likely to become malnourished or die. After many pregnancies, childbirth becomes more dangerous and the mother may die, leaving many motherless children. With a lot of children in a family, it becomes more difficult to feed, clothe, and educate them all well. It is healthier both for the mother and her children to space births by 2 to 3 years.

Health statistics show that increasingly the birth interval from less than 1 year to over 2 years reduces the number of babies under 1 year dying by 50%. Birth spacing by at least 2 years allows every baby to get enough milk and allows the mothers to recover between pregnancies.

The woman and her husband can choose several different methods for spacing births. Advice on these can be obtained from the clinic or special family planning centers. The Volunteer Health Sisters can also give advice to women at the time when they are most interested in avoiding pregnancy, just after delivery.

Birth spacing is a very sensitive topic for many reasons—tribal traditions, religious, and the fact that many young Afghans have been killed. There were family planning clinics in Afghan cities before the war and they were popular. The most common methods were injections and the Pill. Intrauterine devices (IUDs) are not usually culturally acceptable. Condoms are available in Afghanistan. Afghans have a very high birth rate, one of the highest in the world. There are many reasons for this: early marriage for women, lack of female and male education, a very high child death rate (about 1 in 3 under the age of 5 died in prewar Afghanistan), and poor availability of birth spacing methods.

Women who should avoid pregnancy

Pregnancy and delivery can be dangerous times for all women, but there are a few women who are particularly at risk. These are:

Older women

Older women are more likely to suffer from toxemia, high blood pressure, blood clots in the legs and chest, poor contractions of the uterus, prolonged labors and difficult deliveries requiring a caesarian section operation or forceps. They are also more likely to suffer from heavy bleeding after delivery and the baby may have difficulty breathing after a prolonged labor. Babies of older women are twice as likely to die in the first month of life and to have congenital abnormalities like Down's syndrome (brain damage and mongoloid eyes).

Women over 40 years old should avoid pregnancy completely. A permanent contraceptive method like sterilization for the man or woman is good. DepoProvera, the Progesterone-only Pill and IUDs are also recommended.

Women with more than 5 children

These women are more likely to be malnourished and severely anemic from repeated pregnancies. They are more likely to have a baby lying in an abnormal position (traverse, oblique, or breech), and a ruptured uterus or heavy bleeding as a result of an overstretched uterus.

They should avoid pregnancy completely by using an efficient method of contraception like a sterilization operation, IUD, DepoProvera or the Pill.

Very young girls

The custom is for girls to marry very young and start having babies immediately. Young girls under the age of 17 years are not fully grown, and they are more likely to have a prolonged or obstructed labor as a result of narrow hips. Their babies are more likely to be born small and weak.

These girls should avoid becoming pregnant until they are over 17 years old. This would have to be discussed with their husbands and mother-in-laws. Temporary methods like the Pill or DepoProvera are recommended.

Women with a child under 2 years

Many Afghans believe that a pregnant woman's milk is bad, and many women suddenly stop breast feeding a child when they become pregnant again, even though the child is not fully weaned. If this child is under 2 years, he or she has twice the risk of dying as a child of 3 years. If a woman becomes pregnant too soon, 3 people will be at risk of malnutrition: the mother, the child under 2 years old, and the unborn child. Women should not rely on breast feeding alone to prevent them becoming pregnant again. This is only fully effective for the first 3 months and only if exclusive breast feeding is practiced. These women should use a method that does not affect their milk supply, like the Progesterone only Pill, DepoProvera or an IUD.

Women who have been very sick and are still being treated

There are many different sicknesses, such as TB, malaria, kidney infections, heart disease, diabetes, and severe anemia, where the woman must wait to get better and finish treatment before becoming pregnant again. If she does become pregnant during the sickness, she will put her own life and that of the baby at risk. The medicines she is taking may harm the baby. An example of this is Streptomycin injection, which can make the baby deaf. She must use a birth spacing method that does not affect her sickness. For example, women with high blood pressure and heart problems should not take the Combined Pill, which contains estrogen and can cause blood clots in these women. The **safe time**, condoms, and IUDs are all recommended. It is also important to remember that the risk of serious illness or death resulting from pregnancy for these women is many times greater than the risk involved in using *any* of the common methods of birth spacing.

Methods for avoiding pregnancy

The Volunteer Health Sisters should know the following methods for avoiding pregnancy:

Breast feeding

When a woman is breast feeding she is less likely to become pregnant, because the sucking action of the baby sends a message to the ovary via the brain to stop the woman producing an egg every month. After 3 months, when the baby sucks less often at the breast, fewer messages are sent and the woman starts making eggs again. The more often she puts the baby to the breast, the less likely she is to become pregnant. This is why exclusive breast feeding is the best birth spacing method. Women should be told to breast feed for as long as possible, ideally at least 2 years, and to put the baby to the breast frequently, even when they do not have much milk. Many Afghan women are aware that breast feeding reduces fertility.

The safe time

A woman's monthly cycle consists of a week of bleeding and 3 weeks without bleeding. These times can vary a little in different women, but the average cycle is about one month. Explain the monthly cycle to the Volunteer Health Sisters using your 4 fingers, with the first finger marked with a red pen. Usually a woman only makes an egg during 8 days of her monthly cycle and only on these 8 days is she able to become pregnant. These 8 days are called the **fertile time.** If she wants to avoid pregnancy she should not have sex with her husband during these 8 days or he should wear a condom. The 8 day **fertile time** comes midway between two monthly bleedings, starting 10 days after the first day of her bleeding. The remaining 3 weeks in the monthly cycle is the **safe time** (one week of bleeding and 2 weeks with no bleeding). During this time if she has sex with her husband she will probably not become pregnant. This method works well for women who have their periods regularly every 4 weeks and can record them on a calendar. They can then calculate the fertile period by counting 10 days from the first day of their bleeding. The method is more difficult for non-literate people, but they may be helped by the phases of the moon and the 4 finger method, although this may not be completely accurate. They could mark each week with a finger print, knot or mark on a string, making the week of bleeding the first week. Just before they get to the third print, mark, or knot they will know that they must avoid sex or ask their husband to wear a condom. This is just one suggestion for helping illiterate women use this method successfully. Try to think of other methods. Discuss this with the Volunteer Health Sisters because they will also have the same problem when they are teaching other women.

The withdrawal method (Azl)

In this method the husband withdraws his penis from the woman's body before the sperm comes. This is not a very effective method because some sperm leak out into the vagina without the man knowing. If there is no other method of family planning available, then this is better than nothing. This method is recommended in the Quran by the Holy Prophet (Peace Be Upon Him) as long as the wife has given permission. It is probably the most widely practiced birth control method in the world.

Condoms

The condom is a rubber balloon that the man wears over his penis during sex to stop the sperm going into the vagina. It is rolled over the hard penis just before sex. It also protects against sexually transmitted diseases like AIDS, gonorrhea, and syphilis. It is one of the most popular methods and condoms are widely available in most bazaars throughout Afghanistan. Children buy them and use them as balloons. It is best to use condoms only once and then throw them away.

Other more effective methods available from clinics

If people in the community want advice on more effective methods than those described above, the Volunteer Health Sister should send them to the clinic. She can talk to the clinic staff and discover which methods are available. Afghan women prefer the Pill and DepoProvera injection. A more detailed description of some of the methods follows.

DepoProvera Injection

DepoProvera is an injection of female hormone which lasts for 3 months. It should be given during a monthly period or just after childbirth to make certain the woman is not pregnant. If given during pregnancy, it can harm the unborn baby. It can, however, be given when a woman is breast feeding. As long as a woman wants to avoid pregnancy, she can come back to the health provider every 3 months for the injection. When she wants to become pregnant again she just stops coming back for more injections and waits 3 months for the injection to stop working.

This injection has a few minor side effects which are not harmful but tend to worry Afghan women. Periods may become irregular and sometimes even stop completely for a few months. The Volunteer Health Sisters should reassure the women that this sometimes happens and they should just wait patiently for the periods to become normal again. Women often worry that a missed period means they are pregnant again. The VHSs should reassure them that this is only a side effect.

Intra-Uterine Devices (IUDs)

The IUD is a sterile small coil which is inserted into the uterus by a specially trained health worker. It prevents pregnancy by stopping the fertilized egg from attaching to the lining of the uterus. There are several different types of IUDs, some that should be replaced every 2 years (copper types) and some that do not need to be replaced (plastic only) and can stay in for as long as the woman wants. When the woman wants to become pregnant again, she should go to the clinic to have the coil pulled out. This is a very convenient method for Afghan women, who find it difficult to travel or visit the clinic very regularly.

The IUD has a few minor side effects, including slightly heavy, painful periods for the first few months. These usually settle down. There is also a risk of pelvic infection.

Combined and Progesterone-only Pills

The Pill is only suitable for women who can understand that they must take these pills every day and come back to the clinic regularly to get new supplies. If the woman does not take them every day they will not work and she risks becoming pregnant. The Progesterone-only Pill is safe to take when breast feeding. The Combined Pill (containing estrogen and progesterone) should not be given because it reduces milk supply. Side effects include period changes, nausea, and painful breasts, but they usually settle down after a few months.

The Cap

This is a small rubber cap inserted by the woman into her vagina and over the cervix just before sex. She should take it out a few hours after sex. It is more effective if covered with a cream that kills sperm before being inserted.

Sterilization

If the man and woman have decided they do not want any more children, they can choose to have an operation which is permanent. Either the man or the woman can have the operation. The operation in the man is very simple and quick and involves tying the tube that takes the sperm from the testes to the penis. This operation will not affect his masculinity or sex life. The woman can have an operation to tie the tubes connecting the ovaries to the uterus. This is a bigger operation but also quite safe.

Traditional beliefs and practices

The VHS can learn about traditional beliefs and practices related to pregnancy, delivery, and child-spacing from the dais. Dais think that the fertile period is just before and just after the period. They call the man's sperm seri uba (man's water) or seri shinjay (man's worms). Many dais know the baby grows in the lower abdomen, though they often think it grows in the intestine. Some think the baby feeds by licking the fat on the mother's heart. They call the uterus the batchadani (place of the baby). They usually know the signs of periods stopping, cheeks changing color, and feeling tired. In later pregnancy they mention the baby moving, pain in the legs, heartburn, and a change in appetite. They are often asked to treat women who are bleeding and usually advise bed rest, herbal mixtures, and tawiz. They do not consider heavy bleeding dangerous, so do not refer women with this danger sign to the clinic. They do not give any special advice about diet in pregnancy and do not seem to connect diet with the health of the mother and baby. They may sometimes tell the woman to avoid eggs and badi (windy) foods. Women with a history of stillbirths might be thought to have an allergy to food and will be advised to avoid everything accept bread and tea (parhaiz, limited foods). Traditionally, a woman eats after her husband and mother-in-law as a sign of respect. Pregnant women are not routinely referred to the clinic and there is little recognition of danger signs.

In late pregnancy the dai is often asked to visit the pregnant woman in order to massage her abdomen and thighs with oil. This is thought to straighten the baby and prepare it for delivery. Some dais claim to be able to correct an abnormal lie with massage. The family will sometimes prepare clean clothes for the mother and baby. They also prepare warm water, a knife, and thread. The dai will encourage the woman to take a mild laxative, like castor oil, just before the delivery. Pregnancy is thought to be a dangerous time in which many things can go wrong. Traditionally, just before the delivery, the pregnant woman is prepared for death and The Day of Judgement by other women in the house, who wash her hair and paint henna on her hands.

Traditionally, Afghans have used various herbal mixtures taken by mouth or inserted vaginally to avoid pregnancy. It is thought that the woman is at her most fertile just before and just after a period. This means that at the time when the woman is most fertile, in the middle of her cycle, many Afghans think that she is at her least fertile. In other words, many Afghans think that **the safe time is the fertile time and the fertile time is the safe time**. Many Afghan women know that breast feeding reduces their fertility.

Increasing fertility, rather than decreasing it, is a major concern for many Afghan men and women. The majority of traditional treatments for fertility regulation are taken to increase fertility. It is thought that humorally hot foods increase fertility and cold foods reduce it. A woman who has just delivered is considered to be in a cold state, and to increase her fertility again she is given hot foods like halwa, eggs, and nuts.

Islamic views on birth spacing

According to Islamic scholars there is no section in the Quran forbidding a man and his wife to practice birth spacing or to plan their families. All 4 schools of Islamic law, including the Hanafi school found in Afghanistan, permit azl (coitus interruptus). The Holy Prophet (Peace Be Upon Him) approved of this practice as long as the woman had given permission.

The following quote recommends that women space pregnancies by 30 months for the good health of the child: "His mother kept him in her womb and delivered him painfully. Looking after the child until he is weaned takes 30 months." **Sura XLV1 (Ahqaf) Verse 15.**

Islamic quotations

- *Man is made from a drop of mingled sperm.* **Surat LXXVI Verse 2.**
- *The Prophet (PBUH) warned his people against the intermarriage of close relatives, so that their babies would not be born weak. He advised them to search for marriage among strangers and not weaken their offspring.* **Hadith Sharif.**
- *Eat of the good thing that God has made available to you.* **Surat XX (Taha) Verse 81.**
- *Pregnant and breast feeding mothers can break their fast during Ramazan.* **Hadith Sharif.**

CHAPTER 21

Injury Prevention and First Aid Module

LEARNING OBJECTIVES

By the end of this session, the participant will be able to:

1. Teach the prime messages relating to Injury Prevention and First Aid to a VHS, appropriately using training materials
2. Explain to the VHS that she should teach others about how to prevent injuries, how to clean simple injuries, and when and how to refer dangerous cases. Teach the VHS how to give first aid for bleeding and broken bones, but explain that it is not her job to teach others how to perform first aid for bleeding or broken bones
3. Describe in simple language for a VHS at least 5 actions which a person can take to prevent childhood injuries
4. Using demonstrations, teach the VHS how to treat or refer a small burn, a large burn, and a burn near a joint
5. Using demonstrations, teach the VHS how to properly and promptly manage a bleeding part of the body, how to recognize which cases should be sent to a clinic for treatment, and how to make an effective referral
6. Using demonstrations, teach the VHS how to clean and treat a skin wound such as a cut, puncture, or abrasion
7. Using demonstrations, teach the VHS how to immobilize a broken bone
8. Teach the VHS how to promptly refer a case of poisoning to a qualified health provider (doctor or nurse)

PRIME HEALTH MESSAGES

1. Actions to **prevent injuries** are:
   - Raise stoves or fires above the ground so young children cannot reach them.
   - Put a guard/fence around the fire to prevent children from falling into the fire, and build fires away from places where children play.
   - Turn handles of cooking pots inward so children cannot grab them.
   - Get an older child to look after the younger ones when the mother is busy cooking.
   - Hang kerosene lamps high out of the reach of young children.
   - Keep matches, chemicals, medicines, petrol, and sharp instruments like knives and scissors on a high shelf or in a closed trunk which children cannot open.
   - Make electric wiring safe; cover bare wires with tape.
   - Dispose of rubbish carefully, especially broken glass and sharp cans, in an area fenced off from children.
   - Cover or fence off water sources such as wells and ponds.
   - Teach children not to play with unknown objects that could be explosive devices like mines.
2. If a burn is smaller than the size of the palm of the hand, it is a small burn and can be treated at home following prime message #3, which follows. If a burn is larger than the palm of a hand, it is considered a large burn. **Large burns** and **burns near a joint** should be **sent to a qualified health provider** (doctor, nurse, or MCHO) for treatment.
3. There are 5 steps for treating burns at home:
   a. Hold the burn under **cold water** for 5 minutes.
   b. Cover the burn lightly with a **clean cloth.**
   c. Give the patient **fluids** to drink.
   d. Keep the burn clean by **soaking it daily** in water with soap.
   e. **Refer** the patient to a qualified health provider immediately if
      - the burn is larger than the size of a person's palm
      - the burn is near a joint
      - the person looks sick
4. **Heavy bleeding** is **dangerous** because it can kill in a few minutes. The first thing to do when taking care of a bleeding patient is to control the bleeding.
5. **Control the bleeding** from a wound by following these 5 steps:
   a. Raise the part which is bleeding above the rest of the body

   b. Press a clean cloth (or your clean hand if there is not cloth) on the bleeding area for 10-15 minutes
   c. Give the patient fluids to drink
   d. If bleeding or injury is severe, lie the victim down, raise the feet and lower the head so enough blood can get to the person's brain
   e. If bleeding does not stop within 15 minutes after pressing the clean cloth over the wound, send for help or take the person to the nearest hospital or clinic **quickly**

6. **Clean broken skin wounds** (such as cuts and scrapes) after an accident to **prevent germs** from getting inside the body.
7. To **clean broken skin wounds,** follow these 6 steps:
   a. Clean your hands with soap and water before and after cleaning the wound
   b. Use a clean surface for cleansing the wound
   c. Use clean materials such as a cloth for wiping the wound
   d. Clean the wound with a clean cloth, soap, and water to remove all dirt
   e. Do **not** cover the wound with a bandage, ashes, or other covering
   f. If the patient does not get better or if there are signs of pain, swelling, redness, or pus, send the patient to a qualified health provider
8. When a bone is broken, **keep the bone** still (in a **fixed position**) before moving the person. Never massage a limb that may be broken. Never try to push a bone back under the skin if it is sticking out. If a person's back or neck may be broken **send for a qualified health provider; do not move the person.** In the case of fracture and bleeding at the same time, first control the bleeding.
9. There are 3 steps to help a person with a broken bone:
   a. Find stiff materials such as strips of bark or cardboard to place alongside the broken bone as splints to prevent the bones from moving.
   b. Place the stiff materials along the sides of the broken part and tie them in place using three pieces of cloth or rope, at both ends and in the middle of the splints.
   c. Take the injured person to a qualified health provider; but if the back or neck may be broken, stay with the patient and send for help.
10. Common poisons are:
    - rat poison
    - poisonous berries and leaves
    - bleach and detergents
    - kerosene, petrol, or gasoline
    - insecticides
    - lye
    - matches
    - rubbing alcohol

    Prevent poisoning by keeping things **out of reach** of children. An overdose of medicine can also be **dangerous**.
11. If a child is poisoned, **immediately take the child to a qualified health provider** (such as a doctor or nurse) along with a sample of the poison and container.

EXERCISES

EXERCISE 1

INJURY PREVENTION AND FIRST AID

STORY TELLING

Directions: Divide the class into 3 groups. Tell each group a story, using the 3 stories below. Ask each group to discuss among themselves the following questions: How could the injury have been prevented? What type of injury was suffered? What should have been done as soon as the child was injured? Why did the child suffer pain, disfigurement, or death? Ask each subgroup to present their story and answers. Ask members of the group to comment on any real life cases they have experienced.

Stories

Story about Fatima and Mahmoud

In a village in Afghanistan, several families lived together in a small house. They had a lot of children. One winter day when the weather was cold, Gul Bibi brought the small cooking stove inside the house and put a teapot full of water on to boil. Gul Bibi went out of the house to talk with other women in the yard while several of the children played in the warm house. Suddenly Fatima, a 2-year-old, and her older brother Mahmoud fell onto the stove as Mahmoud was rising from the toshak. When the mother heard the children crying she shouted for help. Ko Ko Gul, her aunt, was angry about the accident. Once the children were quieted, she taped dirty potato onto the badly blistered cheek of whimpering Fatima. Mahmoud's hand was burned very badly, so that the red layers of skin were showing. Ko Ko Gul wrapped the hand in an old piece of cloth. The family decided to wait for several days to see how the children improved because it was difficult to travel 20 kilometers to a nearby town where there was a private nurse. The nearby clinic was temporarily closed because the doctor had gone to the city to get a resupply of medicines. Fatima's scarred face and Mahmoud's scarred hands reminded them of that day for the rest of their lives.

Story about Abdul

Abdul's family returned to their district in Wardak Province after being refugees for six years in Pakistan, where he had been born. Abdul's father was able to reconstruct their home and return to farming. Abdul enjoyed the outdoors and often would run out to the field to see his father. One day he was exploring an edge of the field near some rocks. He saw a shiny object emerging from the dust, and as he jumped off the rock to go pull it from the ground, it exploded. His father came running, but the bleeding was so bad that within an hour Abdul had bled to death.

Continued

Continued

Story about Ahmed

There once lived a large happy family. The mother was always busy with household chores. While she was washing the family's clothes one day, her 2-year-old son, Ahmed, and his 3-year-old sister were playing in the yard. Ahmad noticed a sharp rusty knife lying on the ground. Ahmed picked up the knife because he thought it was a toy. His sister also wanted to play with it so she struggled to take it from him. Ahmed's hand was cut with the knife. When his mother saw the bleeding, she quickly poured dust on it to stop the bleeding. After a few days the wound was puffy and pussy. Ahmed's hands and feet soon began to stiffen. The parents wanted to take the child to the clinic as the VHS had recommended, but the grandmother did not agree. "The doctor's medicines are not useful, let's take him to the mullah," she said. Ahmed died.

Time: 50 minutes (20 minutes for small group question and answer, 30 minutes for 3 presentations)

Materials: Story about Fatima and Mahmoud, Story about Abdul, Story about Ahmed

EXERCISE 2

TREATMENT OF BURNS

GROUP AND INDIVIDUAL DEMONSTRATION

Directions: Select 2 persons to demonstrate in front of the group how to provide first aid for a small burn on the fingers. Select 2 other persons to demonstrate in front of the group how to provide first aid for a large burn covering the hand and forearm. Then divide into pairs in order for each person to practice first aid for both types burns.

Time: 45 minutes (15 minutes for each of 3 demonstrations)

Materials: Jug of water, soap, clean cloth, glass

EXERCISE 3

TREATMENT OF BLEEDING

LARGE GROUP AND INDIVIDUAL DEMONSTRATION

Directions: Select 2 persons to demonstrate in front of the group how to provide first aid for a person with a bleeding leg. Then divide into pairs in order for each person to practice.

Time: 45 minutes (15 minutes for large group demonstration, 30 minutes for paired practice)

Materials: Clean cloths, glass of water

EXERCISE 4

TREATMENT OF BROKEN BONES

DEMONSTRATION

Directions Select 2 persons to demonstrate in front of the group how to provide first aid for a person with a broken arm. Then divide into pairs in order for each person to practice.

Time: 45 minutes (15 minutes for large group demonstration, 30 minutes for paired practice)

Materials: Stiff cardboard, tree bark, or thin wood; strips of cloth

EXERCISE 5

REFERRAL FOR CASES OF POISONING

SMALL AND LARGE GROUP ROLE PLAY

Directions: Divide the class into groups of 2 or 3 persons. Ask each small group to develop a role play in which one person is the VHS and one person has swallowed a poisonous substance (the third may be a relative or a medical worker at a nearby clinic). The VHS should use the prime messages. Ask 1 group to perform in front of the class. Summarize the actions a VHS should take if a person has been poisoned.

Time: 30 minutes (15 minutes small group role play, 15 minutes large group role play and summary)

Materials: (**Optional**: Empty jars or boxes to represent containers of a poisonous substance)

REFERENCE PAGES

First aid is the first treatment given to a person who is wounded. A person can be wounded in many different ways: on the road after a car accident, in the house by a boiling kettle, during battle by a mine explosion, and so on. Whoever happens to be near the victim when he or she is wounded is the best person to give emergency first aid. If treatment is started as soon as possible, it may save the wounded patient's life or reduce future health problems. The greater the number of people in the community trained in first aid, the greater the chance of somebody with training being at an accident. The jujahideen always make sure they have a trained first aid worker with them in battle. Many injuries also take place in the home, and the VHSs should train women and older children who show an interest in first aid during their home visits. Then, just as with the mujahideen, there will be one trained first aid worker in every home.

The home can be almost as dangerous to a small child as the battle field is to fighters. Children can be wounded in the following ways:

- By burns from fires, stoves, or kerosene lamps
- By burns from bare electric wires
- By exploding pressure cookers
- By having boiling water fall over them
- By eating or drinking poison (such as insecticide, kerosene, or medicines) left in containers on the ground or on a low shelf
- By falling from trees or the roof of the house

The list is endless and you will get many more examples of injuries in your discussions with the VHSs. Women are also at risk from burns because they do all the cooking. Discuss with the VHSs ways of making the home safer for children who are too young to understand danger.

Injury prevention

Here are some suggestions for keeping children safe:

- Raise stoves or fires above the ground so children cannot reach them.
- Put a guard around the fire.
- Turn handles of cooking pots inward so children cannot pull them.
- Get an older child to look after the younger ones when the mother is busy cooking.
- Keep matches, chemicals, and medicines on a high shelf or in a trunk.
- Hang kerosene lamps out of reach.
- Make electric wiring safe. Cover bare wires with tape.

- Dispose of rubbish carefully, especially broken glass and sharp cans, in an area fenced off from children.

First aid

To save lives, VHSs will have to know how to carry out first aid procedures automatically. They therefore must all practice doing them several times during the training session. To save time you can divide the VHSs into pairs so that they all practice at the same time, while you supervise.

Treatment of bleeding

The first thing to do for a wounded patient is to control bleeding. People can die from heavy bleeding in a few minutes, so there is no time to waste. There are 5 steps in the control of bleeding.

1. **Press a clean cloth on the bleeding area.**

   In an emergency, use the cleanest piece of cloth available, such as a dupatta, chadre, or turban. Fold the cloth into a pad several layers thick to soak up the blood and hold it firmly over the area which is bleeding. If no suitable cloth is available, press the hand directly on the wound.

   Show the VHSs a transparent plastic container with red fluid inside. Block the hole on the side of the container with a piece of plasticine and then open it. Point to the level of fluid dropping in the container. Ask the VHSs how they can stop the level of fluid dropping. Explain that this is like the body of a bleeding patient emptying of blood. Ask one of the VHSs to put a finger over the hole. Point out that the level has stopped falling. Explain that if they press over a bleeding wound with a pad, or their hand, they can help stop the wounded person's body emptying of blood in the same way.

2. **Raise the part which is bleeding above the rest of the body.**

   Water cannot flow uphill. In the same way, blood finds it more difficult to flow up to a wound.

3. **Lie the victim down and raise the legs above the heart.**

   Blood is needed to supply energy and air to the whole body, but if blood is short, it should be used to supply essential parts, like the brain and heart, first. If blood is not getting to the brain, the patient will become drowsy and confused. To help the blood flow to these essential parts, the patient should lie with their feet and legs raised above the heart and brain.

4. **Give the patient fluids to drink.**

   Show the container leaking red fluid again and ask the VHSs to look at the level of the red fluid. Pour red fluid in from the top. They should notice that the level stops dropping when fluid is added from the top. Explain that if we give a person who is bleeding fluids to drink, this will stop the level of fluids in his or her body dropping, just like pouring fluids into the container from the top.

   When a hospital gives blood through a tube into the arm, this also helps to bring the blood volume back to normal. Many people are very reluctant to give their blood to hospitals. Some

are forbidden to do so by their mullahs. The Quran states that it is a man's responsibility to help others, and giving blood to hospitals is a very great way of giving help. If a person is taken to a hospital with heavy bleeding, several members of his or her family who are prepared to give blood should go with this person.

5. **Send for help if bleeding does not stop.**

   Press on the bleeding area for about 10 minutes, keeping it raised; then check to see if the bleeding has stopped. If blood is still soaking through the first pad, place another pad on top and press again. **Do not remove the first pad** because the blood in this pad may have formed a clot over the hole to slow down the bleeding. A bandage can then be tied around the pads to apply firm pressure and keep them in place. If blood is still seeping through after 10 minutes, or if it is bright red and pumping out, send for help from the clinic.

   Point out that the container becomes very pale as the red fluid leaks out of the hole. Explain that the same thing happens to a patient who is bleeding. He or she becomes very pale and feels very weak. He or she also feels cold because there is less blood to keep the body warm. A blanket should be used to cover the patient. The heart has to work harder to push what little blood is left around the body, so the pulse feels faster and weaker at the wrist.

   Some people try to tie a tight bandage above the bleeding to help stop it. This is called a tourniquet. This is not a very safe treatment because, if tied too tight or left on for too long, it can cut off the blood supply completely and kill all the tissue beyond the tourniquet. Tell the VHSs that only very highly trained health workers can apply a tourniquet. They must not do this themselves.

   A person who has lost too much blood will go into a coma. A person in a coma will lose control of the muscle reflexes that protect the airways. For example, a normal person chokes if some food goes down the airway. This choking action helps to bring the food back into the food pipe so it does not block the airway. In the same way, if the tongue falls back and blocks the airway a normal person chokes, and the tongue will come back into the mouth again. But people in a coma do not have these protective reflexes, and so they do not choke if the tongue or substances like blood or vomit fall in the airway. They can die from the blocked airway. **Lie coma patients on their front, face down.** This position makes the tongue hang forward so it will not block the airway.

Treatment of burns

Accidents from burns are very common in Afghan communities, especially among women and children. Some traditional healers inflict small coin-shaped burns on the skin as part of their treatments. These sometimes become infected and have to be treated by the health workers.

The burn victim should be sent to a clinic if:

- **The burn is larger than the size of the person's hand.**

  One danger sign to look for in a burn is the amount of skin burned. A burn is like a hole leaking fluid from the body, and the larger the size of the burn, the more fluid will be lost. You can demonstrate this using 2 plastic pots, one with a large hole, and one with a small hole. Show how the container with the big hole empties more quickly. If the area burned is

smaller in size than a hand, then the VHS can treat the wound herself. If it is larger than this, she should refer the patient to the clinic immediately and give fluids to drink on the way. The clinic staff may decide to put up a drip in order to replace fluids lost from the burn.

- **The burn is near a joint.**

  These burns may need special dressings, especially if they are on the hands. Special dressings will stop the healing scar from sticking the fingers together. When burn scars heal they can contract, and if this happens near a joint, it will bend and become permanently fixed in this position. For example, a scar near the elbow may heal so that a child cannot fully straighten his or her arm. To prevent these deformities, the joints should be very gently bent and straightened 10 times in the morning, afternoon, and evening. Teach the VHSs how to help a patient to do this so she can show the patient's family.

- **The person looks sick.**

  The VHS should accompany or refer any burned patient who looks sick to the clinic.

There are 4 steps for treating burns which are not very serious.

1. **Hold the burn under cold water for 5 minutes.**

   This should be done immediately after the accident and will greatly reduce the damage to the skin. You can compare this treatment to the traditional belief about humoral balance between hot and cold.

2. **Cover lightly with a clean cloth.**

   The burn must be kept clean. Cover it with a light cloth to protect it. If blisters are present, they should not be broken because the layer of skin protects the burn.

3. **Keep the burn clean by daily soaking.**

   Use a bowl of water with a little salt added to soak the wound and then dry it with a clean cloth every day. If the cloth dressing sticks to the burn it should be very gently removed so as not to damage the healing skin. Do this by soaking the cloth in clean water for 5-10 minutes and then removing it.

4. **Give fluids.**

   Burns are like bleeding wounds because fluids leak from the body. The larger the burn, the more fluids will be lost. If the burn covers a large area, too much fluid is lost and the person becomes dehydrated very quickly and may die. All patients with burns need plenty of fluids and good food, including eggs, meat, peas, lentils, and milk.

Treatment of skin wounds

Clean skin wounds as soon as possible after an accident. This will prevent microbes from getting into the wound and causing skin infections with pus, bad smell, redness, swelling and pain. The very dangerous microbe infection, tetanus, is also caused by dirty wounds and can affect adults as well as children.

There are 6 steps for treating skin wounds.

1. **Clean hands.**

   Wash hands before and after cleaning the wound. Otherwise, the microbes can enter the wound or spread from the wound to others.

2. **Use a clean surface.**

   When cleaning a wound, lay it on a clean cloth along with everything needed to clean the wound.

3. **Clean the materials for wiping the wound.**

   Clean the wound with a clean cloth and a pinch of salt in a glass of water. The salt helps to kill microbes. Add only a very little salt; otherwise it will hurt when the wound is cleaned. Wipe away from the middle of the wound to the edge. If you wipe the wound from the skin edge to the middle you will push microbes from the area of unbroken skin into the wound. Use a new piece of clean cloth with each wipe. If cotton wool is used, throw away the cotton piece after each wipe. Continue wiping until the wound is clear of pus and dirt. It sometimes helps to soak the wound in a bowl of water before wiping it. This softens the blood clots so dirt and dressings can be removed more easily. Clean the wound at least once a day and more frequently if there is a lot of pus and a bad smell.

4. **Cover the wound with a clean cloth.**
5. **Do not put anything else on the wound.**
6. **Send the patient to the clinic if he or she is not getting better or if there are signs of infection.** The wound should start healing in 3 to 4 days. If any signs of infection develop (pus, bad smell, redness, pain, or swelling around the wound), microbes are present. Accompany or send the person to the clinic. They may need medicine or a small operation to drain the pus.

Islamic quotations

- *One water drop is the breath of life.*
- *Prevention is better than cure.*

Appendix A

Ministry of Public Health
MCH Department
VHS Program Assessment Form

Name of VHS Trainer ____________________
Name of Trainer's father ____________________
Clinic/Post Number ____________________
Name of Evaluator ____________________
Date of evaluation ____________________

Commander's name ____________________
Party ____________________
Province ____________________
District ____________________
Village ____________________

I. INTRODUCTORY QUESTIONS TO ASK THE VHS TRAINER

1. Are the clinic/post staff familiar with the VHS Program?
   Yes _____ No _____

   Note specific names and title of those staff who are familiar and those who are not familiar with the Program:

   If staff are unfamiliar with the Program, state why:

2. Has the VHS Program been introduced to the community?
   Yes _____ No _____

   If yes, to whom and how? If no, why not?

3. What has been the reaction of the VHS Trainer and other facility staff to this program?

   a. Reaction of VHS Trainer:
      Positive/supportive: Yes _____ No _____
      If no, describe:

   b. Reaction of other facility staff:

      Note name and title:
      Positive/supportive: Yes _____ No _____
      If no, describe:

      Note name and title:
      Positive/supportive: Yes _____ No _____
      If no, describe:

4. What has been the reaction of the community leaders and informal (traditional) health providers to this program? (Try to meet these people to assess their reactions. If not possible, ask the VHS Trainer.)

   a. Note name and title/position in community:

      Who responded to this question?
      VHS Trainer _____ The leader of traditional practitioner _____

      Was the reaction positive/supportive Yes _____ No _____
      If no, describe:

   b. Note name and title/position in community:

      Who responded to this question?

      VHS Trainer _____ The leader of traditional practitioner _____

      Was the reaction positive/supportive? Yes _____ No _____

      If no, describe:

5. Has the catchment area been mapped? Yes _____ No _____

   a. (Ask to see the map.) Is the map complete, with key, symbols, date, distances, etc.?
      Yes _____ No _____

   b. How many households are in the catchment area?

   c. Was this evident from the map? Yes _____ No _____

6. Has VHS recruitment and selection started? Yes _____ No _____
   If yes, how? If no, why not?

7. Which VHSs have been trained, what is their relationship to the Trainer, which modules have been taught (PH/S, CDD, EPI, NU, ARI, SM, AP), when?

Name of VHS	Position in Village or Relationship to Trainer	Modules	Date
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______
______	______	______	______

8. Has the trainer received the due number of kits, ORS, and other teaching materials?
   Yes ____ No ____ If not, why not?

9. <u>On average</u>, how many ORS packets are distributed monthly by the VHSs in this site? (Refer to monitoring tools if necessary.) ________

10. <u>On average</u>, how many soap bars are distributed monthly by the VHSs in this site? ________

11. What are the criteria VHSs use for distributing soap?
    No criteria ________
    A sick family member________
    Health education session about Hygiene/Sanitation________
    Health education session about Diarrhea ________
    Other criteria (describe): ______________________________

12. What are criteria VHSs use for distributing ORS?
    No criteria ________
    A sick family member________
    Health education session about Hygiene/Sanitation________
    Health education session about Diarrhea ________
    Other criteria (describe) ______________________________

13. How many kits have been distributed? ________

14. Which VHSs have received kits? (Information should coincide with question number 7 above.)

Name of VHS	Was she trained? Yes	No
____________________	________	________
____________________	________	________
____________________	________	________
____________________	________	________
____________________	________	________
____________________	________	________
____________________	________	________
____________________	________	________
____________________	________	________
____________________	________	________

15. Has the trainer completed the VHS Report form (number and location of other health facilities in area, type and location of traditional practitioners, number and location of schools, etc.)?
    Yes _____ No _____

Trainer's remarks:

Assessment Team's Comments:

II. QUESTIONS TO ASK THE VHS TRAINER REGARDING VHS MODULES

A. PERSONAL HYGIENE AND SANITATION: Simulated or actual demonstration?

1. What are the prime health messages for Personal Hygiene and Environmental Sanitation?

	Prime Message	Complete	Accurate	Needs Improvement
a.	________	________	________	________
b.	________	________	________	________
c.	________	________	________	________
d.	________	________	________	________
e.	________	________	________	________
f.	________	________	________	________

2. (Ask the Trainer to demonstrate teaching this module with a VHS or as a simulation. Evaluate the teaching methods used.)

Teaching methods	Accurate	Needs Improvement
a. Role play	________	________
b. Demonstration	________	________
c. Discussion	________	________
d. Lecture	________	________
e. Question and answer	________	________

3. What kind of teaching aids were used for this module and are they appropriate for the message?

	Type	Appropriate	Needs Improvement	MSH-Provided Teaching Aid	Other Aid
a.	________	________	________	________	________
b.	________	________	________	________	________
c.	________	________	________	________	________
d.	________	________	________	________	________
e.	________	________	________	________	________
f.	________	________	________	________	________

4. Assessment Team's Comments:

B. CONTROL OF DIARRHEAL DISEASES (CDD): Simulated or actual demonstration?

1. What are the prime health messages for CDD?

	Prime Message	Complete	Accurate	Needs Improvement
a.	____________	______	______	______
b.	____________	______	______	______
c.	____________	______	______	______
d.	____________	______	______	______
e.	____________	______	______	______
f.	____________	______	______	______

2. (Ask the Trainer to demonstrate this module to a VHS or as a simulation. Evaluate the teaching methods used.)

Teaching methods	Accurate	Needs Improvement
a. Role play	______	______
b. Demonstration	______	______
c. Discussion	______	______
d. Lecture	______	______
e. Question and answer	______	______

3. What kind of teaching aids were used for this module and are they appropriate for the message?

	Type	Appropriate	Needs Improvement	MSH-Provided Teaching Aid	Other Aid
a.	____________	______	______	______	______
b.	____________	______	______	______	______
c.	____________	______	______	______	______
d.	____________	______	______	______	______
e.	____________	______	______	______	______
f.	____________	______	______	______	______

4. Assessment Team's Comments:

C. EPI (Immunization): Simulated or actual demonstration?

1. What are the prime health messages for Immunization?

	Prime Message	Complete	Accurate	Needs Improvement
a.	____________	______	______	______
b.	____________	______	______	______
c.	____________	______	______	______
d.	____________	______	______	______
e.	____________	______	______	______
f.	____________	______	______	______

2. (Ask the Trainer to demonstrate this module to a VHS or as a simulation. Evaluate the teaching methods used.)

Teaching methods	Accurate	Needs Improvement
a. Role play	______	______
b. Demonstration	______	______
c. Discussion	______	______
d. Lecture	______	______
e. Question and answer	______	______

3. What kind of teaching aids were used for this module and are they appropriate for the message?

	Type	Appropriate	Needs Improvement	MSH-Provided Teaching Aid	Other Aid
a.	____________	______	______	______	______
b.	____________	______	______	______	______
c.	____________	______	______	______	______
d.	____________	______	______	______	______
e.	____________	______	______	______	______
f.	____________	______	______	______	______

4. Assessment Team's Comments:

D. NUTRITION: Simulated or actual demonstration?

1. What are the prime health messages for Nutrition?

	Prime Message	Complete	Accurate	Needs Improvement
a.	__________	______	______	______
b.	__________	______	______	______
c.	__________	______	______	______
d.	__________	______	______	______
e.	__________	______	______	______
f.	__________	______	______	______

2. (Ask the Trainer to demonstrate this module to a VHS or as a simulation. Evaluate the teaching methods used.)

Teaching methods	Accurate	Needs Improvement
a. Role play	______	______
b. Demonstration	______	______
c. Discussion	______	______
d. Lecture	______	______
e. Question and answer	______	______

3. What kind of teaching aids were used for this module and are they appropriate for the message?

	Type	Appropriate	Needs Improvement	MSH-Provided Teaching Aid	Other Aid
a.	__________	______	______	______	______
b.	__________	______	______	______	______
c.	__________	______	______	______	______
d.	__________	______	______	______	______
e.	__________	______	______	______	______
f.	__________	______	______	______	______

4. Assessment Team's Comments:

E. COMMON COLD AND PNEUMONIA: Simulated or actual demonstration?

1. What are the prime health messages for Common Cold and Pneumonia?

	Prime Message	Complete	Accurate	Needs Improvement
a.	______	______	______	______
b.	______	______	______	______
c.	______	______	______	______
d.	______	______	______	______
e.	______	______	______	______
f.	______	______	______	______

2. (Ask the Trainer to demonstrate this module to a VHS or as a simulation. Evaluate the teaching methods used.)

Teaching methods	Accurate	Needs Improvement
a. Role play	______	______
b. Demonstration	______	______
c. Discussion	______	______
d. Lecture	______	______
e. Question and answer	______	______

3. What kind of teaching aids were used for this module and are they appropriate for the message?

	Type	Appropriate	Needs Improvement	MSH-Provided Teaching Aid	Other Aid
a.	______	______	______	______	______
b.	______	______	______	______	______
c.	______	______	______	______	______
d.	______	______	______	______	______
e.	______	______	______	______	______
f.	______	______	______	______	______

4. Assessment Team's Comments:

F. SAFE MOTHERHOOD: Simulated or actual demonstration?

1. What are the prime health messages for Safe Motherhood?

	Prime Message	Complete	Accurate	Needs Improvement
a.	___	___	___	___
b.	___	___	___	___
c.	___	___	___	___
d.	___	___	___	___
e.	___	___	___	___
f.	___	___	___	___

2. (Ask the Trainer to demonstrate this module to a VHS or as a simulation. Evaluate the teaching methods used.)

Teaching methods	Accurate	Needs Improvement
a. Role play	___	___
b. Demonstration	___	___
c. Discussion	___	___
d. Lecture	___	___
e. Question and answer	___	___

3. What kind of teaching aids were used for this module and are they appropriate for the message?

	Type	Appropriate	Needs Improvement	MSH-Provided Teaching Aid	Other Aid
a.	___	___	___	___	___
b.	___	___	___	___	___
c.	___	___	___	___	___
d.	___	___	___	___	___
e.	___	___	___	___	___
f.	___	___	___	___	___

4. Assessment Team's Comments:

G. INJURY PREVENTION AND FIRST AID: Simulated or actual demonstration?

1. What are the prime health messages for Injury Prevention and First Aid?

	Prime Message	Complete	Accurate	Needs Improvement
a.	______	______	______	______
b.	______	______	______	______
c.	______	______	______	______
d.	______	______	______	______
e.	______	______	______	______
f.	______	______	______	______

2. (Ask the Trainer to demonstrate this module to a VHS or as a simulation. Evaluate the teaching methods used.)

Teaching methods	Accurate	Needs Improvement
a. Role play	______	______
b. Demonstration	______	______
c. Discussion	______	______
d. Lecture	______	______
e. Question and answer	______	______

3. What kind of teaching aids were used for this module and are they appropriate for the message?

	Type	Appropriate	Needs Improvement	MSH-Provided Teaching Aid	Other Aid
a.	______	______	______	______	______
b.	______	______	______	______	______
c.	______	______	______	______	______
d.	______	______	______	______	______
e.	______	______	______	______	______
f.	______	______	______	______	______

4. Assessment Team's Comments:

III. QUESTIONS FOR THE TRAINER RELATED TO THE MONITORING, REFERRAL, SUPERVISION, AND SUPPLY SYSTEMS

A. MONITORING SYSTEM

1. Has an initial Monitoring System been established yet using the standardized VHS form?
   Yes _____ No _____ If no, why not?

2. For the Monthly Monitoring Form, can the Trainer correctly explain the meaning of all of the symbols?
   Yes _____ No _____

3. Does the Trainer have a schedule for collecting monitoring tools?
   Yes _____ No _____
   How often does s/he collect the monitoring tools from the VHS?
   Monthly_____ Weekly_____ Other (describe): _____

4. What proportion of VHSs turn in their monitor reports on a regular basis (e.g., 2 out of 3?, 9/10)?
   ____

5. Ask to see the VHS monitor reports. Does the Trainer/Supervisor have them on file?
   Yes _____ No _____ If not, why not?

6. Ask to see the 6-Month Monitoring Report Summary. Is it completed?
   Yes _____ No _____
   If it is completed, is it done correctly?
   Yes _____ No _____
   If it not completed, why not?

7. For the 6-Month Monitoring Form, the trainer should demonstrate how to fill the form given the following example. During the last 6 months, the VHS distributed 90 ORS packets (all of the packets were handed to different mothers; 60 were for male children under age 5; 30 were for girls under age 5). Health education on CDD was given to each mother when she received the ORS. During this same 6-month period, these same mothers each received a bar of soap. Twenty of the boys were referred to a facility for treatment of diarrhea and 10 of the girls were referred. In addition, 1 old man was referred to the hospital for severe diarrhea.

   Can the trainer correctly complete the form?
   Yes _____ No _____

B. REFERRAL SYSTEM

1. Has any referral system been initiated yet?
   Yes _____ No _____ If not, why not?

2. Where and to whom do VHSs refer patients? (Note specific name/title/affiliation and distances.)

3. Are any transport arrangements made by the community for referrals?
   Yes _____ No _____

4. Comments on referral system:

C. SUPERVISION SYSTEM

1. Has an initial supervisory system been established yet?
   Yes _____ No _____ If not, why not?

2. How is supervision conducted (direct or indirect)?

3. Does the Trainer have a regular schedule for supervising the VHSs?
   Yes _____ No _____
   How often does s/he supervise the VHS?
   Monthly_____ Weekly_____ Other (describe): _____

4. Ask to see the Supervisory checklists. Does the Trainer/Supervisor have them on file?
   Yes _____ No _____ If it is not completed, why not?

5. Does the Trainer know how to use the VHS Supervisory Review Form?
   Yes _____ No _____ If not, what is confusing?

6. Comments on the supervisory system, particularly regarding the use of the Supervisory Review Form:

D. SUPPLY SYSTEM

1. How much of each of these supplies do you currently have in stock? (Put a checkmark beside those items which you actually observed.)

Shoulder bags	______	Immunization posters	______
ORS packets	______	CDD flip charts	______
Liter measuring cups	______	Safe Motherhood flip charts	______
Mini soap bars	______	Other items	______
Markers	______	____________	______
Hygiene posters	______	____________	______

2. Have there been any supply problems at this site?
   Yes ____ No ____ If yes, please describe:

Appendix B

Volunteer Health Sister (VHS) Program
Goal and Objectives

Goal of the VHS Program

The goal of the VHS Program is to improve the health knowledge and practices of Afghan women through the implementation of a household-level community outreach program (the Volunteer Health Sister Program).

Primary objectives of the VHS Program

Primary objectives 1 through 11 of the VHS program are to be accomplished by February 1994, and objectives 12 through 16, by August 1995. The objectives for February 1994 are:

1. To establish 12 VHS pilot sites through the training of at least 100 VHSs
2. To improve general health knowledge of Afghans so that prime health messages for 7 core modules will be understood and explained by:
   a. 100% of Trainer/Supervisors, as measured by at least 80% recall
   b. 80% of VHSs, as measured by at least 50% recall
   c. at least 1 primary caretaker in 50% of households in the VHS catchment area, as measured by 30% recall
3. To improve personal hygiene and environmental health practices, as evidenced by being able to effectively demonstrate 2 ways to show the link between hygiene and disease prevention, for:
   a. 100% of Trainer/Supervisors
   b. 60% of VHSs
   c. at least 1 primary caretaker in 30% of the households in the VHS catchment area
4. To improve the control of diarrheal diseases as evidenced by:
   (1) being able to correctly prepare a packet of ORS, for:
      a. 100% of Trainer/Supervisors
      b. 60% of VHSs
      c. at least 1 primary caretaker in 30% of households in the VHS catchment area
   (2) having administered ORS to a dehydrated child in the last month, for:
      a. 100% of Trainer/Supervisors
      b. 60% of VHSs
      c. at least 1 primary caretaker in 30% of households in the VHS catchment area.

5. To improve the nutrition of infants by:

   (1) being able to effectively explain when and what supplementary foods should be given by age 6 months:

      a. 80% of Trainer/Supervisors

      b. 60% of VHSs

      c. at least 1 primary caretaker in 30% of households in the VHS catchment area

   (2) increasing the number of children who receive supplementary food, by age 6 months, by 10%, in the VHS catchment area.

6. To the child morbidity and mortality rates from Acute Respiratory Infections (ARI) as evidenced by:

   (1) being able to correctly explain the difference between common cold and pneumonia

      a. 100% of Trainer/Supervisors

      b. 60% of VHSs

      c. at least 1 primary caretaker in 30% of households in the VHS catchment area

   (2) a. proper treatment of a child with cold and proper treatment of a child with pneumonia, by 80% of Trainer Supervisors

      b. proper recommendation, by at least 50% of VHSs, for a child with cold and proper referral of a child with pneumonia, within 2 days after symptoms appeared

      c. at least 40% of households in the VHS catchment area where a child developed signs of pneumonia, the primary caretaker arranged to take the child to an appropriate facility within 2 days after symptoms appeared

7. To improve immunization coverage, as demonstrated by the fact that in VHS pilot sites where there is a mobile or fixed-facility immunization program:

   a. 100% of Trainer/Supervisors with children under age 2 have had their child vaccinated according to the vaccination schedule

   b. 60% of VHSs with children under age 2 have had their child vaccinated according to the vaccination schedule

   c. at least 40% of the children under age 2 in the VHS catchment area have been vaccinated on schedule

8. To improve delivery care, as demonstrated by the fact that within the last 4 months:

   a. 80% of Trainer/Supervisors have referred at least 50% of pregnant patients to a trained health worker (MCHO, nurse-midwife, trained dai) for conducting the delivery

   b. 50% of VHSs have referred at least 50% of pregnant women in their catchment area to a trained health worker for conducting the delivery

   c. 30% of women delivering have been attended by a trained health worker

9. To improve first aid skills as evidenced by being able to correctly demonstrate how to provide first aid for a burn near a joint
   a. 90% of Trainer/Supervisors
   b. 50% of VHSs
   c. at least one primary caretaker in 25% of households in the VHS catchment area
10. To have a monitoring system in place as evidenced by:
    a. 80% of Trainer/Supervisors holding regular (monthly) meetings with at least 75% of their VHSs to review and collect the monitoring tools
    b. 60% of VHSs being able to correctly complete the monitoring tool
11. To have a functioning supply system in place as evidenced by:
    a. 80% of Trainer/Supervisors having supplies of soap and ORS in stock for distribution to VHSs
    b. 60% of VHSs having supplies of soap and ORS in their home for distribution to the community
    c. at least 50% of households in the VHS catchment area having received soap and/or ORS from their VHS along with a health education session on product use

The primary objectives of the VHS Program in terms of health status are, by August 1995, in the VHS catchment areas:

12. To decrease the number of under-5's who die of diarrheal diseases by 20%
13. To decrease number of under-5's who are malnourished as measured by mid-upper-arm circumference by 20%
14. To decrease the number of under-5's who die of acute respiratory infections by 20%
15. For EPI:
    A. To decrease mortality from measles in under-5's by 20% in VHS catchment areas where there is a mobile or fixed-facility EPI program
    B. To decrease mortality from tetanus among women between age 15 and 45 by 20% in those VHS catchment areas where there is tetanus toxoid available within a 10 km. radius or where there is a mobile or fixed-facility EPI program
16. To decrease maternal mortality by 20%

Appendix C

VHS Baseline Survey
Community Leader Interview Questionnaire

Section 1.B: **TO BE COMPLETED BY THE FIELD SUPERVISOR FOR EACH VHS PROGRAM SITE. ONE COMMUNITY INTERVIEW SHEET SHOULD BE COMPLETED FOR EACH COMMUNITY LEADER INTERVIEWED.**

Interview Date ________________ Field Supervisor's initials ____________

(MEET WITH THE COMMUNITY LEADERS (MULLAH, COMMANDERS, ETC.) TO ELICIT THEIR OPINIONs AND UNDERSTANDING OF THE VOLUNTEER HEALTH SISTER PROGRAM. RECORD INTERVIEWS WITH VARIOUS COMMUNITY LEADERS.)

1. Name of Community Leader: __________________________

2. Role in Community:__________________________________

3. Have you heard about the Volunteer Health Sister Program offered through the health center (name specific center)?
   ____ Yes ____ No

(IF #3 IS "YES", CONTINUE QUESTIONS WITH THIS COMMUNITY LEADER. IF "NO", STOP HERE BUT DO NOT DISCARD THIS SHEET.)

4. What are the responsibilities of a Volunteer Health Sister?

5. What are the responsibilities of the community toward a Volunteer Health Sister?

6. How did you find out about the Volunteer Health Sister Program?

7. a. Is any member of your (extended) family a Volunteer Health Sister? ____ Yes ____ No

   b. **(IF 7.a. IS YES, ASK:)** Who? **(CHECK ALL THAT APPLY.)**
   ____ wife ____ sister ____ daughter ____ mother

   ____ other **(DESCRIBE):** ______________________________

   c. **(IF 7.a IS "NO", ASK:)** Although we cannot make any promises about the next training of Volunteer Health Sisters, would you like someone from your (extended) family to become a Volunteer Health Sister?
   ____ Yes ____ No

8. Please share your suggestions about how to expand or improve the Volunteer Health Sister program. (WRITE EXACT WORDS. USE EXTRA SPACE ON REVERSE IF NECESSARY.)

Appendix D

VHS Baseline Survey
Family Interview Questionnaire

ID#:_______________

Section 2.B: **(FILL OUT 1 FAMILY INTERVIEW SHEET FOR EACH FAMILY INTERVIEWED. CHECK TO SEE THAT ALL THE PAGES OF THIS FAMILY INTERVIEW SHEET ARE ATTACHED BEFORE STARTING THE INTERVIEW. BRING A LITER MEASURE, ORS PACKETS, AND A CALENDAR. ASK THE FIELD SUPERVISOR FOR THESE ITEMS IF YOU DO NOT HAVE THEM.)**

Interview Date_________________ Field Supervisor's Initials_____

Name of Interviewer________________ Interviewer's Initials_____

Name of Respondent and father's name____________________________

(INTRODUCE YOURSELF TO THE RESPONDENT AND EXPLAIN THE PURPOSE OF THE INTERVIEW.)

1. a. Who is the primary caretaker in this family?
   ___ mother
   ___ grandmother
   ___ father
   ___ other (describe: ______________________)

   b. Is the respondent the primary caretaker in this family? ___yes ___no **(IF NO, PUT A CIRCLE AROUND THE RESPONDENT IN 1.a ABOVE.)**

   (IF PRIMARY CARETAKER IS NOT AVAILABLE, CHOOSE ANOTHER FEMALE ADULT CARETAKER OVER AGE 16, SUCH AS MOTHER, GRANDMOTHER, AUNT, OR SISTER.)

2. **(FOR 2a-e USE THE CALENDAR AND INCLUDE ONLY PERMANENT RESIDENTS, I.E. THOSE WHO HAVE LIVED AT LEAST 6 MONTHS IN THE FAMILY.)**

   a. How many people live permanently (over 6 months) in this family? _________

   b. How many children under age 5 reside in this family? ________

   c. How many women age 15-45 reside in this family? ____

   d. How many women in the household are pregnant? ___

   e. How many women in the household have had a delivery in the last 6 months? ____

(IF THERE ARE NO CHILDREN UNDER 5, NO PREGNANT WOMEN, OR NO WOMEN WHO HAVE HAD A DELIVERY IN THE LAST 6 MONTHS, STOP THE INTERVIEW HERE AND INFORM THE FIELD SUPERVISOR.

IF THIS IS A CONTROL FAMILY, SKIP QUESTIONS 6-11 AND GO DIRECTLY TO QUESTION #12. IF THIS IS A FAMILY SERVED BY A VHS, GO TO QUESTION #3.)

3. What is the name of VHS who has provided a health education, a health services, or health referrals for this household? ____________

   IF THIS HOUSEHOLD DOES NOT NAME OR KNOW OF A VHS, STOP HERE AND DISCUSS WITH FIELD SUPERVISOR.

4. Is (NAME OF VHS) a relative of any family members?
   ___yes ___no **(IF YES, ASK:)** What is the relationship? ____________

5. How long has (NAME OF VHS) provided to your family health education, health services, or referrals? **(USE CALENDAR.)**
   ____ less than 6 months
   ____ 6-12 months
   ____ more than 12 months

6. What type of service contact has (NAME OF VHS) provided to your family? **(CHECK ALL THAT APPLY.)**
   ____ health information and demonstrations
   ____ gives soap and/or ORS
   ____ examines patient and refers to health worker
   ____ other

7. a. How often does (NAME OF VHS) provide to your family some type of health service?
   ____ at least once every 7 days
   ____ at least once every 14 days
   ____ once per month
   ____ only occasionally; less than once per month

   b. Do you see (NAME OF VHS) regularly or only when there is a health problem?
   ____ regularly
   ____ irregularly
   ____ only if there is a health problem

8. Which person in your family usually has contact with (NAME OF VHS)?
   ____ primary caretaker
   ____ respondent **(DESCRIBE ROLE IN FAMILY:)** _________
   ____ other family member **(DESCRIBE ROLE IN FAMILY:)** __________________

9. a. Does the (NAME OF VHS) reside in your compound?
___ yes __no
(IF NO, CONTINUE TO 9.b-d. IF YES, SKIP TO QUESTION #10.)

b. Does (NAME OF VHS) usually come to your house regarding health matters, or do you go to her house? **(CHECK ALL THAT APPLY. IF THE RESPONDENT ANSWERS EITHER OF THE FIRST TWO RESPONSES, SKIP 9.c and 9.d. IF THE RESPONDENT ANSWERS "BOTH" GO TO 9.c. and 9.d.)**
____ (NAME OF VHS) comes to my house
____ I go to (NAME OF VHS)'s house
____ both

c. For what reason does (NAME OF VHS) come to your house?

d. For what reason do you usually go to (NAME OF VHS)'s house?

10. a. Has (NAME OF VHS) given any soap to your family?
___yes ___no

b. Did (NAME OF VHS) explain why she was giving soap?
___ yes ___ no

11. Has (NAME OF VHS) given ORS to anyone in your family?
___ yes ___ no

12. **(FOR CONTROL FAMILIES ONLY, ASK:)** Have you ever been visited by a VHS for a health service? ___ yes ___ no **(IF YES, END THE INTERVIEW AND DISCUSS WITH THE FIELD SUPERVISOR.)**

13. a. Where do you usually get your drinking water?
___well ___stream ___other (describe:)
___karaz ___spring
___river ___tap

b. Where is the source of drinking water located?
____ in the house
____ in the compound
____ outside the compound but in the village
____ outside the village

c. Approximately how many families share your source of drinking water? _____

d. How long have you resided in this village? **(USE CALENDAR.)**
____ less than 12 months
____ more than 12 months but less than 5 years
____ more than 5 years

e. What is the occupation of the head of the family? **(CHECK ALL THAT APPLY.)**
____ farmer
____ shopkeeper
____ other **(DESCRIBE:)** ______________________________

f. **(OBSERVE THE CONSTRUCTION OF THE HOUSE AND CHECK THE TYPE OF CONSTRUCTION.)**
____ mud
____ concrete
____ other **(DESCRIBE:)**__________________________

PRIME MESSAGES

1. PERSONAL HYGIENE AND ENVIRONMENTAL SANITATION

a. What is a microbe?

(IF THE PRIMARY CARETAKER DOES NOT KNOW WHAT A MICROBE IS, SKIP TO Prime Message Question #1.f.)

b. What does a microbe cause?

c. Where do microbes live?

d. What can you do to avoid microbes?

e. How can you kill microbes?

f. What can you do to protect your family from sickness?

g. **(OBSERVE THE GENERAL CLEANLINESS OF THE HOUSE. HOW WOULD YOUR RATE THE HOUSE IN TERMS OF CLEANLINESS?)**
____ good ____ fair ____ poor

2. CONTROL OF DIARRHEAL DISEASES

a. What is diarrhea?

b. List 3 ways you can prevent diarrhea.
1)
2)
3)

c. How can you treat a child with diarrhea?

d. Here is a packet of ORS. Please show me how you prepare ORS. (**AS THE RESPONDENT PREPARES ORS, MARK WHETHER OR** NOT SHE DOES EACH STEP:)

-Uses a liter container or a container marked to show a liter level ___yes ___no
-Uses correct amount of water ___yes ___no
-Uses entire packet of ORS ___yes ___no
-Stirs the ORS until it is completely dissolved ___yes ___no

e. Please explain how you would give ORS to your child, in what quantities, and for how long.

1)

2)

3)

f. Have any of your children under age 5 had diarrhea in the last 7 days? ___yes ___no
(IF NO GO TO PRIME MESSAGE QUESTION #2.g. IF YES, ASK:)

1) Did you give him/her ORS? ___yes ___no

2) From whom did you get the ORS? (**ELICIT TYPE OF PROVIDER IF NECESSARY BY ASKING:**) Is this person a doctor, nurse, dai, BHW, Volunteer Health Sister, or other?
___ doctor ___ dai
___ nurse ___ VHS
___ BHW ___ Other (**DESCRIBE:**)__________

g. Please name 3 danger signs of diarrhea or dehydration that indicate you should immediately take your child to the nearest clinic or health provider.
1)
2)
3)

3. IMMUNIZATION

a. Name 3 diseases that can be prevented by immunizations.
1)
2)
3)

b. How many vaccinations does a child need in the first year of life? ________

c. How many children do you have under age 2? ______
(IF NONE, SKIP TO PRIME MESSAGE QUESTION #3.h.)

d. What is the name of your youngest child under age 2? ____________________

e. How old is (NAME)? ________________ **(NOTE AGE IN MONTHS. USE CALENDAR.)**

f. Has (NAME) received any vaccinations? ___yes ___no
(IF NO, SKIP TO PRIME MESSAGE QUESTION #3.h.)

g. What vaccinations has (NAME) received? **(RECORD THE RESPONSE IN THE IMMUNIZATION SCHEDULE TABLE BELOW IN THE COLUMN LABELLED "VERBAL".)**

(IF TB/BCG IS MENTIONED, ASK:) May I see the BCG scar on the child? ___yes ___no **(MARK YES OR NO DEPENDING WHETHER OR NOT YOU ARE ABLE TO SEE THE CHILD. IF THE CHILD HAS THE SCAR, WRITE IN "SCAR" NEXT TO THE ROW FOR TB. IF THE CHILD HAS NO SCAR, WRITE IN "NO SCAR" NEXT TO THE ROW FOR TB IN THE FOLLOWING IMMUNIZATION SCHEDULE TABLE.)**

Do you have a vaccination card for (NAME)? ___yes ___no

(IF YES, REVIEW AND NOTE DATES VACCINATIONS WERE RECEIVED IN THE IMMUNIZATION SCHEDULE TABLE BELOW.)

IMMUNIZATION SCHEDULE TABLE

Vaccine	Verbal		Date on Card
	yes	no	
TB			
DPT 1			
DPT 2			
DPT 3			
Polio 1			
Polio 2			
Polio 3			
Measles			

h. Do pregnant women need to be immunized? ____yes ____no

i. To whom and where can you go for immunization for yourself and your children? **(ELICIT SPECIFIC PERSON AND SITE. IF RESPONDENT DOES NOT KNOW, WRITE "DOES NOT KNOW".)**

4. NUTRITION

a. 1) When should you start breast feeding? ______________
   2) How long should your baby only receive breast milk? ___________________________
   3) How long should you continue to breast feed? ________

b. Name 3 kinds of supplementary food which babies should eat.
   1)
   2)
   3)

c. Should you continue to breast feed an infant who is ill? ____ yes ___no

d. Is (NAME) still breast feeding? ___ yes ___no

e. Name 3 foods that are especially good for growth and making strong blood for pregnant and breast feeding women.
   1)
   2)
   3)

f. Why do pregnant women need extra food?

5. COMMON COLD AND PNEUMONIA

a. 1) What is pneumonia?

   2) What are 3 danger signs of pneumonia?
      1)
      2)
      3)

   3) What should you do if you think your child has symptoms of pneumonia, i.e., fever with short and fast breathing?

b. Name 2 ways you can prevent common colds and pneumonia.
   1)
   2)

c. Should you continue to feed a sick child who has diarrhea or pneumonia? ___yes ___no

d. 1) How many children do you have under age 5? _____

   (IF "0", SKIP TO PRIME MESSAGE QUESTION #6. IF ANSWER IS MORE THAN 1, ASK:) What is the name of the youngest? ____________________

   2) **(IF THERE IS MORE THAN 1 CHILD UNDER AGE 5, ASK THE FOLLOWING QUESTION USING THE NAME OF THE YOUNGEST CHILD:)** Has (NAME) had any of these symptoms in the last 7 days? **(CHECK ALL THAT APPLY:)**
   _____ runny nose
   _____ cough

_____ fever
_____ fast breathing
_____ chest indrawing
(IF ANY ARE CHECKED, ASK:) What did you do?

6. SAFE MOTHERHOOD

a. How many years should you wait between pregnancies in order to reduce the dangers during labor and delivery?

____

b. Name 3 things you can do during pregnancy to reduce the dangers during labor and delivery.
1)
2)
3)

c. 1) Should pregnant women receive tetanus toxoid vaccine? ____ yes ____ no
2) How many tetanus toxoid vaccines are a complete course for women? _____

d. Name 2 foods that prevent anemia.
1)
2)

e. 1) Are there any pregnant women in your house?

____yes ____no **(IF YES, ASK:)** Who will assist in the delivery? __________________
(NOTE TYPE OF HEALTH PROVIDER. IF NONE, WRITE "NONE". IF THE PERSON IS NOT CLEARLY A TRAINED HEALTH PROVIDER, NOTE RELATIONSHIP—I.E. AUNT, MOTHER-IN-LAW. IF THE PERSON IS NOT CLEARLY A TRAINED HEALTH PROVIDER, ASK:) What type of health/medical care training has (NAME) had? ______________________

7. INJURY PREVENTION AND FIRST AID

a. Note 3 ways you can prevent childhood injuries.
1)
2)
3)

b. Name 2 ways to treat a person with a small burn.
1)
2)

c. 1) If I have a bleeding leg, tell me or show me what you would do to take care of the bleeding. **(NOTE BELOW IF AS EACH STEP IS PERFORMED OR STATED.)**

-Lays the patient down ____yes ____no
-Raises the leg ____yes ____no
-Washes the leg ____yes ____no
-Covers the bleeding part with gauze ____yes ____no
-Applies pressure (for 10-15 min) ____yes ____no
-Gives the patient fluids to drink ____yes ____no

2) Was this an explanation or demonstration?
___explanation ___demonstration ___did not know answer

<u>GREENBOOK PRACTICES</u>

8. a. May I see your greenbook? **(NOTE WHETHER OR NOT GREENBOOK IS AVAILABLE:)** ___ yes ___ no **(IF NO, SKIP TO 22.)**

   b. **(REVIEW GREENBOOK AND NOTE LAST DAY RECORDED:)** ________

9. **(REVIEW GREENBOOK TO SEE HOW MANY DIARRHEAL CASES HAVE BEEN RECORDED IN THE LAST 30 DAYS. DO NOT INCLUDE DYSENTERY. FILL IN THE FOLLOWING:)**

   a. Number of "watery" diarrheal cases in <5s: ______

   b. Number of "watery" diarrheal cases in <5s given ORS packets: ______

   c. Number of "watery" diarrheal cases in <5s given anti-diarrheals such as antimotilities, antisecretories:_____

   d. **(IF THERE ARE ANY PROBLEMS IN COMPLETING THE INFORMATION FOR 19.a TO 19.c, NOTE HERE:)**

10. (REVIEW GREENBOOK TO SEE HOW MANY CASES OF COMMON COLD AND PNEUMONIA HAVE BEEN RECORDED IN THE LAST 30 DAYS. FILL IN THE FOLLOWING:)

   a. Number of colds (Upper Respiratory Infection/URI) in <5s: _____
   b. Number of colds (URI) cases in <5s given antibiotics:____
   c. Number of pneumonia (Lower Respiratory Infection) cases in <5s: _____
   d. Number of pneumonia (LRI) cases in <5s

Appendix E

Agenda for VHS Baseline Survey Training
July 18-20, 1993

DAY 1: July 18 (Sunday)

09:00-12:30	**AM Session**	
09:00-09:05	Prayer from the Holy Quran	Professor Jalal
09:05-09:15	Welcome and Opening Remarks	Dr. Wahidi
09:15-09:30	Brief Overview of the VHS Program	Ms. Linda Tawfik
09:30-09:45	Purpose of Baseline Evaluation	Dr. Diana Silimperi
09:45-10:30	Survey Evaluation Principles	Dr. Silimperi
10:30-10_45	Tea	
10:45-11:30	Roles and Responsibilities of the Survey Team	Dr. Ahmadullah Ahmadzai
11:30-11:45	Overall Design of the Baseline Survey	Dr. Ahmadullah Ahmadzai
11:45-12:30	Types of Survey Questions	Dr. Silimperi
12:30-01:30	Lunch	
01:30-05:00	**PM Session**	
01:30-02:00	Selection of Villages	Dr. Ahmadullah Ahmadzai
02:00-02:30	Types of Respondents	Dr. Ahmadullah Ahmadzai
02:30-03:00	Selection of VHSs	Dr. Ahmadullah Ahmadzai
03:00-04:00	Selection of Controls (A & B)	Dr. Silimperi
04:00-05:00	Field Testing of Survey in Tajabad	Dr. Bilquees, Mrs. Zerghoona, Dr. Shahagha

DAY 2: July 19 (Monday)

08:30-12:30	**AM Session**	
08:30-09:45	Selection of Controls Exercise	Dr. Ahmadullah Ahmadzai
09:45-10:15	Definitions and Special Terms	Dr. Ahmadullah Ahmadzai
10:45-10:30	Tea	
10:30-11:30	Interviewer Techniques Role Play	Dr. Silimperi and Ms. Tawfik
11:3-12:30	Development of Introduction	Dr. Shahagha and Dr. Silimperi
12:30-01:30	Lunch	

01:30-05:00	**PM Session**	
01:30-02:00	General Instructions	Dr. Silimperi
02:00-04:00	Small Group Review of Questionnaire	Dr. Ahmadzai, Dr. Shahagha, Dr. Hasibullah
04:00-04:30	Tajabad Field Test	Dr. Shahagha, Dr. Belgees, Mrs. Zerghoona
04:30-05:00	Open Questions and Answers	

DAY 3: July 20 (Tuesday)

08:30-12:30	**AM Session**	
08:30-09:00	Field Instructions Dr. Hasibullah	
09:00-10:15	Daily Plan Exercise	Dr. Silimperi
10:15-10:30	Tea	
10:30-12:30	Paired Exercise	Dr. Ahmadzai, Dr. Shahagha, Dr. Hasibullah
12:30-01:30	Lunch	
01:30-05:00	**PM Session**	
01:30-02:30	Special Section Practice	Dr. Ahmadzai, Dr. Shahagha, Dr. Hasibullah
02:30-04:00	Common Field Problems Role Plays	Dr. Silimperi
04:00-04:30	Interviewer Code of Conduct	Participant
04:30-05:00	Evaluation	
	Wrap up and Summary	Ms. Tawfik

Appendix F

Instructions for Completing Questionnaires

1. Note that all instructions to the Interviewer are in **bold** and CAPITAL letters.
2. Record all answers in ink with a pen.
3. Write neatly and legibly. Use the single line cross-out method discussed in class to note changes in respondents answers or interviewer errors in recording. Initial and date any such corrections.
4. Be sure to fill in the identity code in every sheet of the questionnaire.
5. If you need more space than is provided to record an answer, use blank space at the bottom of the page or a blank page. Put the identity code at the top of the page. Be sure to note the question number and the title of the Section and Part of the questionnaire before you write the additional information. Sign and date. Also, make a note at the original question, indicating that additional information is attached on a separate sheet.
6. Record an answer for EVERY question and part of a question.
7. Pay attention to the type of question and instructions for answers. Be sure to check only one answer unless instructed to do otherwise.
8. Fill in every cell in any table, unless instructed to do otherwise.
9. ASK YOUR SUPERVISOR FOR HELP IF YOU ARE UNSURE OF HOW TO PROCEED.
10. As soon as you finish an interview, BEFORE you leave the house, do the following 5 checks:
    - Check to see that you have recorded an answer for every question on every page.
    - Check to see that you have all pages of every part of the questionnaire.
    - Check to see that you have filled in the identity code on every page, including any attached extra pages.
    - Check to see that all your recordings are neat and legible.
    - Check to see that all numbers have a unit.

    As you complete this checklist for every page, write your initials in the bottom page corner. This will indicate that you have performed the field checklist for every page.
11. Introduce yourself and explain the purpose of the interview BEFORE beginning the interview session. Answer any questions.
12. Double check that the person you are going to interview fits the criteria for a respondent for the particular part of the questionnaire you are filling out.
13. Be sure to thank the respondent for her time and assistance at the end of the interview.
14. If you are interrupted or for some reason the respondent requests that you continue the interview on another day, note this on the questionnaire. When you return to finish the interview, record the new date on the pages or next to the questions you complete at that time.
15. Before you leave for a field trip, check to be sure you have all interview materials. Carry an extra pen and plastic to keep questionnaires dry. Each morning, perform a review of interview materials and supplies before you begin your interview schedule.

Appendix G

Analytical Tools

BRAINSTORMING

Brainstorming is a technique for generating a list of ideas about an issue in a short period of time. It is used any time multiple ideas are needed; for example, in generating lists of problems, topics for data collection, potential solutions, and items to monitor. Brainstorming stimulates creativity by allowing everyone to speak their ideas without critique and it visualizes all aspects of a topic. The 5 steps in brainstorming are:

1. Define the subject of the brainstorming session.
2. Allow everyone time to think briefly about the issue.
3. Set a time limit for brainstorming.
4. Each group member calls out his or her idea in a predetermined order. Each item is noted so all can view them during the session. No comment or reaction is given during the actual brainstorming exercise. Continue going around the group until the time is finished or there are no more ideas to be shared. Group members say "pass" if they have no idea to contribute.
5. When the brainstorming session is complete, clarify the ideas that were generated.

FISHBONE DIAGRAMS

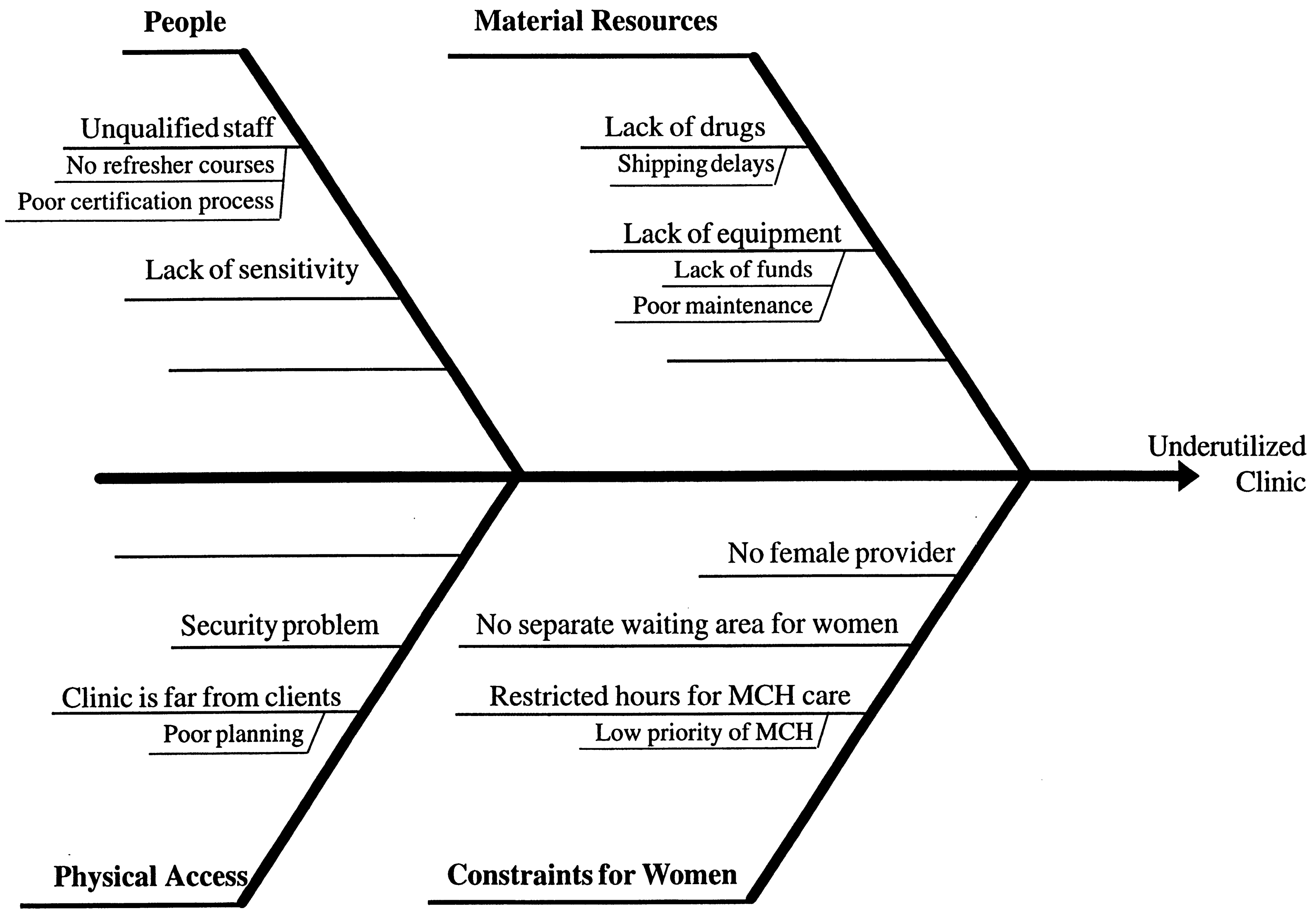
A **Fishbone (Cause and Effect) Diagram is a diagram which shows a large number of possible causes of a problem.** It is used for getting an overview of a problem, for facilitating team members' use of their personal knowledge to identify causes of a problem, for providing ideas for data collection and/or solutions, and as a starting point for looking at where improvements should be focused. The 5 steps in a Fishbone Diagram are:

1. Construct a Fishbone Diagram by placing the problem statement on the center of the right side of the paper. Draw a horizontal line across the paper with an arrow pointing to the problem statement.
2. Determine major categories of causes or use standard categories and place them at the end of diagonal lines.
3. In a structured brainstorming session, note all possible main causes for the problem by placing them on the appropriate "bones". Generate ideas by asking "Why?" about each apparent cause to get at its underlying causes.
4. For each possible cause noted, list subcauses and place them on smaller "bones" so that it is possible to understand the root causes of the smaller problem.
5. When all ideas have been noted, consider which areas are priorities for improvement, which causes can be easily eliminated, and which areas need more research.

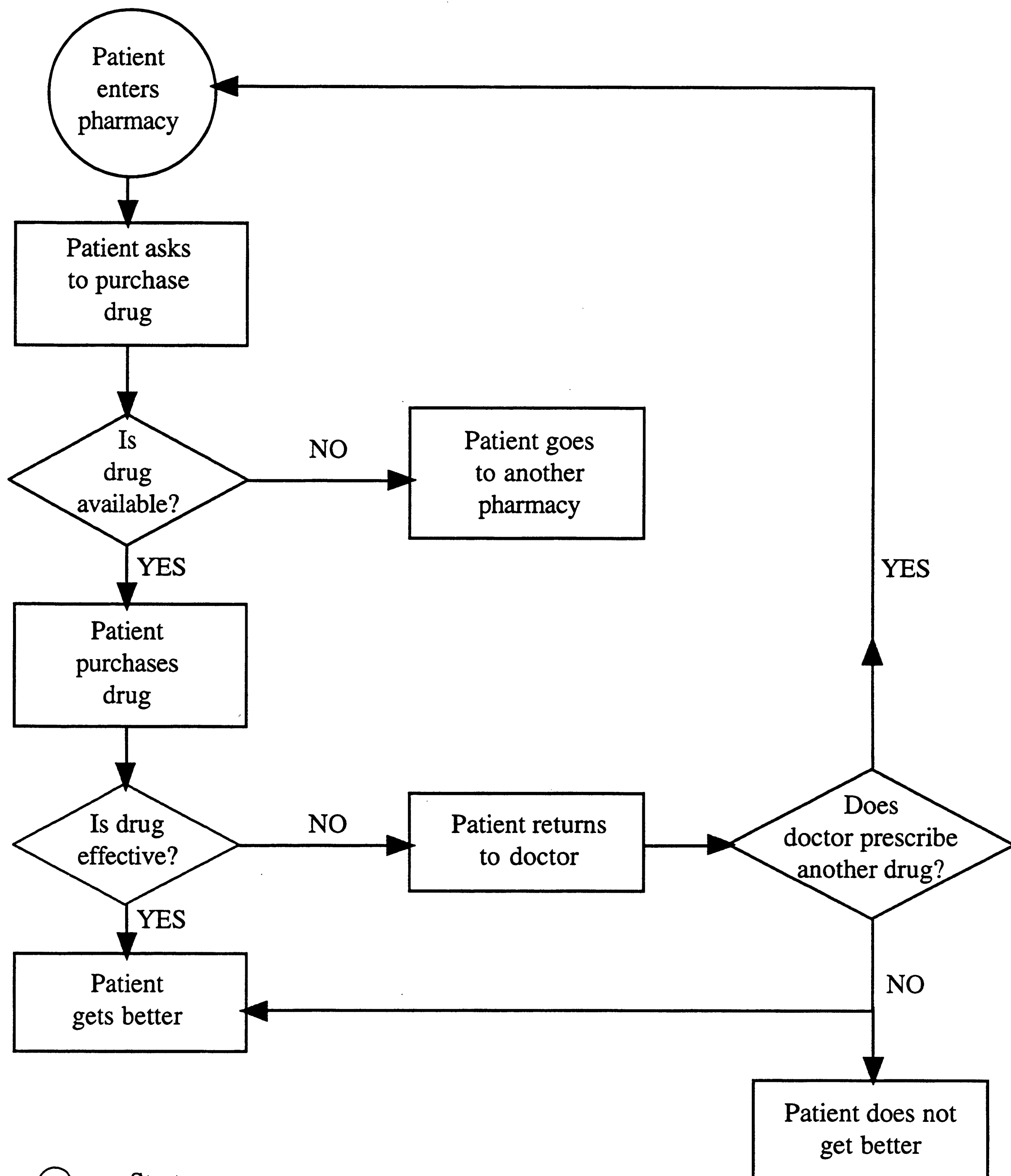
A Fishbone (Cause and Effect) Diagram for an underutilized clinic is shown below.

FLOW CHARTS

A **Flow Chart is a diagram used to illustrate the steps in a work process.** It is used for identifying the actual path that a service or a product follows, in order to see visible evidence of redundant efforts, unnecessary steps, delays, or other problems; or it can identify the ideal path for a service or product. Flow charts are used to identify a problem, especially where in the process the problems are, and also for planning solutions by showing an ideal way for carrying out work. The flow chart below shows the experience of a patient at a pharmacy and shows how this tool can highlight where problems tend to occur. If one analyzes each step in the flow chart in terms of the dimensions of quality (access to service, effectiveness, efficiency, etc.) and on the final customer satisfaction, the bottlenecks in the system are focal points for improvements.



Fishbone Diagram
People
Unqualified staff
No refresher courses
Poor certification process
Lack of sensitivity
Material Resources
Lack of drugs
Shipping delays
Lack of equipment
Lack of funds
Poor maintenance
Underutilized Clinic
No female provider
No separate waiting area for women
Restricted hours for MCH care
Low priority of MCH
Constraints for Women
Security problem
Clinic is far from clients
Poor planning
Physical Access


Flow Chart of Patient at the Pharmacy
Patient enters pharmacy
Patient asks to purchase drug
Is drug available?
NO
Patient goes to another pharmacy
YES
Patient purchases drug
Is drug effective?
NO
Patient returns to doctor
Does doctor prescribe another drug?
YES
YES
Patient gets better
NO
Patient does not get better
= Start
= Action
= Decision

Technical Glossary

Activities: Actions undertaken by program staff in order to achieve program objectives.

Anemia: A disease in which the blood lacks enough red blood cells. Signs include paleness of inside eyelids, pale skin, and weakness.

Antiemetic: A medicine that controls vomiting and nausea.

Antispasmodic: Medicine used to relieve cramps or spasms of the gut.

Assessment: In this manual, assessment means to determine the value of the program by evaluating its activities to ensure that they are proceeding according to plan; an assessment may or may not be systematic.

Baseline Survey: A survey that is conducted early in the life of a project to establish data against which future results will be compared.

Basic Health Workers (BHWs): Male community health care providers (with a minimum of 6th grade education) who have been trained to provide basic preventive community health education as well as to provide essential care for common, potentially life-threatening conditions like diarrhea, malaria, and acute respiratory infections.

Bias: Something which influences, distorts, or prejudices.

Brainstorming: A group activity which allows people to generate ideas, raise questions, pose solutions, and reach agreement on issues concerning many individuals.

Catchment Area: The geographical area which a program or facility is intended to serve.

Community: A group of people with shared interests and concerns who often live in the same locality and who are often characterized by a common history, language, religion, beliefs, culture, and traditional values.

Competency-Based Training: Training that focuses exclusively on teaching the skills, facts, and attitudes that are related to specific jobs.

Consumption-Based Estimate: Prediction of future supply requirements on the basis of historical information on supply consumption.

Cost-Effectiveness: The relationship between cost, as measured in monetary value, and effectiveness, as measured in terms of specific performance indicators. A cost-effective activity is one in which the effectiveness seems to justify the cost.

Coverage: The extent to which something is 'covered'. In health terms, this means the extent to which those who need certain services are actually receiving them.

Critical Step: Points in a process where a mistake will poorly affect a person or other parts of the health system.

Data: The numbers and results from taking a measure.

Dehydration: The loss of too much fluid from the body, which results in danger signs such as no urine, thirst, skin that stays wrinkled when pinched, weakness or irritability, cool "clammy" skin, and/or unresponsiveness to talking or touching (unconsciousness).

Diarrhea: Abnormally loose stool (may be watery, have blood or mucus, or be mixed,) in which there are more than 3 loose movements in a 24-hour period (or more than 5 in a breast feeding infant).

Dysentery: Diarrhea with mucus and blood; it is usually caused by an infection.

Effectiveness: The extent to which a program has madee desired changes or met its objectives thorugh delivery of services.

Efficiency: The extent to which a program has used resources appropriately and completed activities in a timely manner.

Evaluation: A process of gathering and analyzing information for the purpose of determining whether a program is carrying out the activities that it had planned and the extent to which the program is achieving its stated objectives (through these activities).

Experiential Learning: A method of teaching which uses active participation and the applied use of new skills through role playing and on-the-job experience, in addition to lecturing.

External Evaluation: An evaluation undertaken by an external evaluator or external team not directly involved in the program.

Female Health Worker: A traditional dai who has been trained to assist women in childbirth and to provide home care and/or referral for children suffering from common illnesses.

Field Test: A test of materials (such as survey tools or health education materials) to determine their effectiveness prior to using them on a broader scale.

First aid: Emergency care or treatment for someone who is sick or injured.

Fishbone (Cause and Effect) Diagram: A diagram which shows a large number of possible causes of a problem.

Flow Chart: A diagram used to illustrate the steps in a process or procedure.

Focus Group: A planned and guided discussion among the participants of a selected group for the purpose of examining a particular issue.

Gantt Chart: The summary of a work plan, presented in the form of a chart showing the major activities planned in their chronological sequence, as well as the week or month in which they will be conducted and the person(s) responsible for carrying them out. It sometimes includes the resources that will be necessary to carry out the activities.

Goal: The proposed long-range benefits of the program for the selected population, defined in general terms.

Impact: The extent to which the program has made a long-term change in the attitudes, behavior, or health of the program participants and beneficiaries.

Indicator: An observable phenomenon which can be measured and analyzed for the purpose of establishing baseline information and measuring program change.

Infant Mortality Rate (IMR): The death rate of infants less than 1 year of age, usually expressed as the number of deaths of infants aged less than 1 year per 1000 live births.

Input: The resources used in a program.

Internal Evaluation: An evaluation of a program undertaken by an person or team who is directly involved in the program.

Job Description: A document which lists the job title, the responsibilities associated with the job, and the skills and qualifications required of the worker.

Key: A brief explanation for symbols on a map which describes what each symbol represents.

Logistics: The science of procuring, maintaining, and transporting supplies.

Management: The means of achieving objectives toward a goal in an efficient manner; getting things done through people; the efficient use of manpower, materials, and money.

Maternal Mortality Rate (MMR): The number of maternal deaths in a given period divided by the number of live births during the same period. The maternal mortality rate is usually expressed per 100,000 live births.

MCH Officer: A female, mid-level health worker who is responsible for promoting and providing well baby care and prenatal, natal, and postnatal care (including family planning); training and supervising VHSs, VHS supervisors, FHWs, and FHW supervisors; and managing a MCH clinic.

MCH Regional Health Officer: The technical person responsible for MCH activities at the regional level.

Mission: A brief general statement of the type of organization, its main purpose, and its values.

Monitoring: The systematic and continuous following of activities to ensure that they are proceeding according to plan.

Monthly Monitoring Form: A tool to keep track of the productivity of the VHS, or more specifically, to keep track of the number and type of contacts between the Volunteer and the individuals to whom she provides a service as well as the consumption of products such as soap or ORS. (See below for definition of Six (6)-Month Monitoring Summary Form.)

Needs Assessment: An analysis that studies the needs of a specific group, presents the results in a written statement detailing those needs (such as training needs, priorities for health services, etc.), and identifies the actions required to fulfill these needs, for the purpose of program development and implementation.

NGO: A non-governmental organization (usually locally based).

Objective: The anticipated result or outcome of a program, representing changes in the knowledge, attitudes, and behavior of the program's clients, described in measurable terms and indicating a specific period of time during which these results will occur.

Oral Rehydration Salts (ORS): Oral rehydration salts; used to prepare a special drink to prevent dehydration in a person who has diarrhea and to treat dehydration once it has occurred.

Output: The type and quantities of goods and services produced by a process or program.

Outcome: The result or effect of a process or program.

Paper Trail: Records of the movement of resources (financial and material) kept to enable such movement to be traced and resources accounted for.

Pareto Principle: A principle which states that 80% of the trouble comes from 20% of the problems.

Petty Cash: A fund in which a fixed amount of cash is set aside for small immediate cash outlays and is replenished periodically as it is used.

Planning: A continuing process of analyzing program data, making decisions, and formulating plans for action in the future, aimed at achieving program goals.

Pretest: A test given to clients, trainees, or any other specific group of people prior to an intervention, such as training, for the purpose of determining a baseline against which progress will be measured.

Population-Based Estimate: Prediction of future supply requirements based on the demographic composition of the population, disease patterns, and treatment norms; estimate to supply the entire target population.

Post-Test: A test given to clients, trainees, or any other specific group of people after an intervention, which is compared to pretest results to measure progress toward planned objectives.

Primary Caretaker: The person who has the primary responsibility for taking care of the children in a household.

Primary Health Care: Essential health care made universally accessible to individuals and acceptable to them, through their full participation and at a cost the community and country can afford.

Prime Health Messages: The key phrases, or concepts, of the VHS curriculum which should be mastered by the VHS in order for her to provide quality services.

Process: A series of actions or functions that bring about a result.

Procurement: The process of acquiring supplies, including those obtained by purchase, donation, and manufacture.

Quality: Good performance; doing the right thing.

Quality Assurance: The management activities required to assure that the health care of the patient is safe, effective, and acceptable to the patient; all the arrangements and activities that are meant to safeguard, maintain, and promote the quality of health care; a systematic process for closing the gap between actual performance and the desirable outcomes; a process of measuring quality, analyzing the deficiencies discovered, and taking action to improve performance followed by measuring quality again to determine whether improvement has been achieved.

Ratio: A proportion obtained by dividing one quantity by another quantity. For example, 40 Volunteer Health Sisters divided by 2 Supervisors is a ratio of 20 Volunteer Health Sisters to 1 Supervisor, or 20:1.

Referral Point: A health facility which can appropriately respond to an individual's medical/ health need or a health provider who can appropriately manage it.

Refresher Training: Periodic training given to staff for the purpose of reinforcing skills or introducing new concepts or techniques.

Resources: The means available for use in conducting the planned activities, such as staff, money, and materials.

Rural Health Officer: A district-level supervisor, responsible for managing primary health care activities wihtin teh district.

Service-Based Estimate: Prediction of future supply requirements based on the study of services provided, disease patterns treated, and standard treatment norms; estimated using the number of health providers available for supply distribution.

Session Training Plan: A tool for preparing a training session which outlines the date, module, subtopics, duration, teaching methods, and materials for conducting the session.

Six (6)-Month Monitoring Summary Form: A tool used to aggregate the information from the monthly monitoring forms. The 6-Month Monitoring Summary Form has the same purposes as the monthly form, but by aggregating the information it allows one to more easily analyze program progress more easily.

Strategies: The methods that the organization will use in order to deliver services and implement activities to achieve its goal.

Supervisory System: The methods and procedures used to monitor the volume and quality of work performed by subordinate staff, as well as to provide necessary support to staff. The system requires a well-defined structure and adequate supervisory personnel, adequate incentives, a clear understanding of what supervision entails, on-site sessions with the person being supervised, and appropriate supervisory tools.

Supervisory Review Form: A checklist used to methodically assess the skills, knowledge, and approach of the VHS.

Survey Site: Geographical area where a survey is being conducted. It includes the entire area and its population around the location where a program has been started, including control areas.

Sustainability: The ability of a program to provide quality services to its clients and expand its scope of services and clients while decreasing its dependence on funds derived from external sources and increasing reliance on resources generated from the program and through local funding sources.

Target Population: The specific population intended as beneficiaries of a program, such as women and children or residents of a particular village.

Targets: Objectives that have been broken down into smaller units and restated in numerical terms. They pertain to a specific program component, such as training or supervision, and encompass a specific period of time such as a year, quarter, month or week.

Tasks: Activities broken down into specific assignments or duties.

Teaching Objectives: A statement of the knowledge and skills that should be mastered in order to complete a VHS module or a training session.

Timeline: The designated period of time in which activities will occur and the chronological sequence of these activities.

Trainer/Supervisor: The person responsible for training Volunteer Health Sisters who has received training on how to set up and run a VHS Program. His or her responsibilities encompass both training and supervision.

Under-5 Mortality Rate: The number of deaths of children between birth and age 5 compared to the number of children in that age range. It is usually expressed as deaths per 1,000 live births.

Validity: The extent to which something is reliable and actually measures or makes a correct statement about that which it claims to; based on sound information.

Volunteer Health Sister: A woman (literate or non-literate) who is given knowledge and skills to deal specifically with the health problems of women and children in their household as well as in their extended family or community at large, and to work in close relationship with the health services.

VHS Program Assessment Form: A checklist used to methodically assess the skills, knowledge, and approach of the VHS Trainer/Supervisor as well as to assess the progress of the program in terms of the number of staff trained and the state of its management systems (referral, supervision, logistics, etc.).

Work Plan: A document covering a specified period of time which lists all planned activities, the date by which they will be accomplished, the resources that they will require, and the people responsible for carrying them out.

Work Planning: A process through which an organization decides what activities will be conducted, which department or staff will carry them out, the resources that will be needed, and the time frame for completing activities.

Dari Glossary

Afeem	Opium
Ahaadith	The collection of Hadith; the sayings of the Prophet (Peace be Upon Him)
Azl	Coitus interruptus
Badi	Windy
Barthang	A home fluid made of herbs which is traditionally given to children with diarrhea
Batchadani	Uterus; "place of the baby"
Chadre	Large shawl
Dai	A traditional birth attendant
Dam	Qpcial prayers; blowing of Quaranic verses onto sick parts of the body by the mullah
Dokan	Small village shops that sell a variety of essential items, frequently including medicines such as aspirin, vitamin C, and ointments
Eid	An Islamic holiday which is celebrated at the end of Ramazan (the holy month of fasting) and 2 months and 10 days later
Ghee	Clarified butter
Gur	Brown sugar traditionally used in a home fluid to give to a child with diarrhea
Gutti	A home fluid made of herbs which is traditionally given to children with diarrhea
Halwah	Soft wheat cereal cooked with sugar and oil
Jinn	Spirits; small or female spirits which can be good or bad
Kidgiri	Rice and dahl

Kohl	Charcoal used for black eye make up
Lassi	A drink made from yogurt which can be made sweet or salty
Lugusticum	A home fluid which is traditionally given to children with diarrhea
Mullah	Islamic religious leader who is also considered a powerful curer. The mullah prays for the patient, may blow Quaranic verses onto sick parts of the body, and may make special tawiz (amulets) for the patient.
Parhaiz	A limited diet in which many foods are forbidden for long periods of time
Pirs	Holy men
Purdah	Seclusion of women; literally "veiled"
Quran	The word of Allah as revealed to the Prophet (Peace be Upon Him)
Ramazan	The Islamic holy month of fasting
Sawab	Religious merit
Seri Shinjay or Seri Uba	Sperm
Shinjay	Worms
Shorwar	Bread soaked in milk or meat soup
Suji	Soft wheat cereal
Talo	Sunken fontanelle
Tawiz	A piece of paper with inscriptions from the Quran sewn into a small cloth or leather packet. They are made by the mullahs or by special tawiz makers.
Ziarat	Shrine of a holy man

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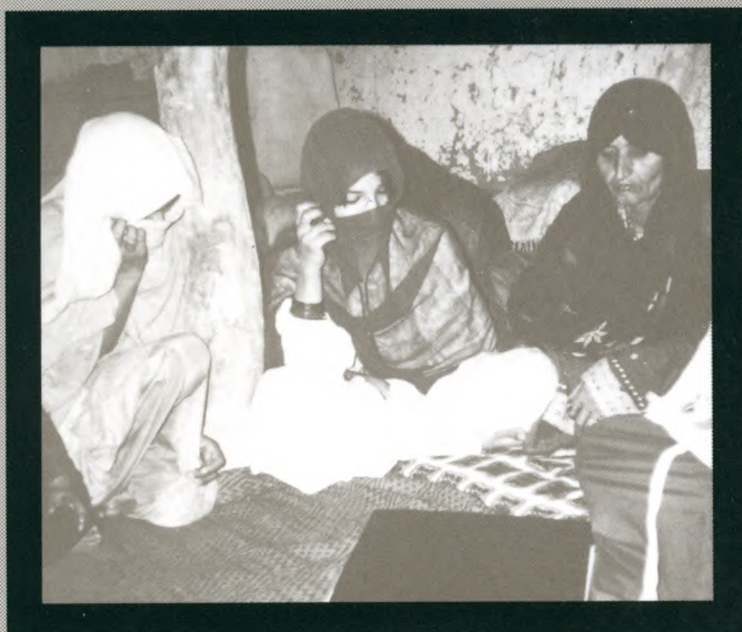
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About Management Sciences for Health

Management Sciences for Health (MSH) is a private, non-profit organization dedicated to closing the gap between what is known about public health problems and what is done to solve them. Since its founding in 1971, MSH has collaborated with health decision-makers to improve the quality of health and population services and to make these services available and affordable for all.

During its 22-year history, MSH has assisted public- and private-sector health and population programs in over 100 countries throughout the world. MSH has provided technical assistance, conducted training, carried out applied research, and developed systems for use in health program management. MSH maintains a staff of 190 technical and management experts, who are based in the Boston, Massachusetts headquarters, 17 field offices, and project offices in Washington, DC.

Six technical programs at MSH provide a mechanism for MSH staff to carry out short-term assignments in their specialty areas: Population, Management Training, Drug Management, Strengthening Health Services, Health Financing, and Management Information Systems. Each Program works with government agencies and other organizations in developing countries to help bridge the gap in public health management.



Mortality rates of Afghan women, infants, and young children are among the highest in the world. Afghan women must cope with the scarcity of health personnel and resources, as well as the rural distribution of the population and constraints placed on women's public activities by their Muslim faith.

The Volunteer Health Sister Program, an informal Maternal and Child Health (MCH) outreach program, addresses some of the most prevalent but preventable causes of death by training community-based volunteers to provide household-level care and referrals to other providers. The name "Volunteer Health Sister" is derived from the Afghan concept that every woman is a sister to others in the community and, as a sister, shares and helps others as a family member would. The Volunteers offer low-cost solutions that target poor women and their children and encourage women to participate actively in the health care system.

This manual was developed for the Volunteers' Trainer/Supervisors and Program Managers to help them plan and manage a Volunteer Health Sister Program in their communities. The cultural context and the examples used are specific to Afghanistan, but the basic principles apply to all community-based health staff. This manual prepares the Trainer/Supervisors and Program Managers to:

- Develop community support for the Volunteer Health Sisters
- Recruit, select, train, and supervise Volunteer Health Sisters
- Develop management systems for quality assurance, finance, and logistics
- Train the Volunteer Health Sisters in principles of Maternal and Child Health, including specific curriculum materials on:

  Personal hygiene and environmental sanitation

  Control of Diarrheal Diseases (CDD)

  Immunization

  Nutrition

  Common cold and pneumonia

  Safe motherhood

  Injury prevention and first aid

The Manual provides the trainers with basic skills in training techniques and program management, including sample forms and exercises to use with their trainees.